

## DOCUMENT RESUME

ED 137 2

CE 008 246

**TITLE** Exemplary Competency-Based Vocational Teacher Education Project: Handicapped Component. Competency and Criteria Identification Phase: Professional Competencies and Assessment Criteria for Administrators and Teachers of Vocational Education Programs for the Handicapped in Florida. Series No. 9.

**INSTITUTION** Florida State Univ., Tallahassee. Program of Vocational Education.

**SPONS AGENCY** Florida State Dept. of Education, Tallahassee. Div. of Vocational Education.

**PUB DATE** 76

**NOTE** 83p.; Pages 35-38 (table of competency ratings) and pages 50-61 (table of assessment criteria for competencies) may not reproduce well in hard copy because of small type. For related documents see CE 008 244-246, CE 008 366-369, and CE 008 657

**EDRS PRICE** MF-\$0.83 HC-\$4.67 Plus Postage.

**DESCRIPTORS** \*Handicapped; Job Analysis; \*Performance Based Teacher Education; \*Performance Criteria; Program Development; Special Education; \*Special Education Teachers; State Programs; State Surveys; Tables (Data); \*Task Analysis; Teacher Education; Teacher Qualifications; \*Vocational Education

**IDENTIFIERS** Florida

**ABSTRACT**

One of a series of nine reports of Project ACTIVE (Attaining Competence for Teaching in Vocational Education), this report focuses on the criteria for assessing mastery of the professional competencies (skills) important to vocational educators serving handicapped students. An overview of competency-based vocational teacher education (CBTE) and the exemplary CBTE project is provided. Part 1 describes the competency identification phase of the handicapped education component including review of related research, report of a questionnaire survey of Florida vocational educators applying for funds for programs for the handicapped, findings (competencies with mean importance ratings), and conclusions. Part 2 describes the procedures for identifying and validating of specific criteria for assessing mastery of the competencies and lists the criteria in a 12-page table under 90 competency statements grouped into the following categories: (1) Program planning, development, and evaluation, (2) instructional planning, (3) teaching methods-media, (4) student evaluation, (5) management, (6) guidance, (7) school-community relations, (8) student organizations, (9) instructor's professional role and development, and (10) unique competencies. It is suggested that grouping of competencies for use in a preservice or inservice program can be accomplished based on the unique needs of participants and the objectives of the particular programs. Appendixes contain instruments used in the study. A bibliography is included. (T1)

ED131231

EXEMPLARY COMPETENCY-BASED VOCATIONAL  
TEACHER EDUCATION PROJECT:  
HANDICAPPED COMPONENT

COMPETENCY AND CRITERIA IDENTIFICATION PHASE:  
PROFESSIONAL COMPETENCIES AND ASSESSMENT CRITERIA  
FOR ADMINISTRATORS AND TEACHERS OF  
VOCATIONAL EDUCATION PROGRAMS FOR THE HANDICAPPED  
IN FLORIDA

PROJECT DIRECTOR DR. ROBERT E. ANDREYKA  
PROJECT COORDINATOR DR. WILLIAM E. BLANK  
GRADUATE ASSISTANT MR. CLAYTON CLARK

Program of Vocational Education  
Florida State University  
Tallahassee, Florida 32306

In Cooperation With  
Florida State Department of Education  
Division of Vocational Education  
Tallahassee, Florida 32304

CE 008 246

U.S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION  
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

Final Report of  
Competency and Criteria Identification Phase  
Of Handicapped Component

Project No. VTAD-5 #6-0128

From September, 1975 to June, 1976

EXEMPLARY COMPETENCY-BASED VOCATIONAL  
TEACHER EDUCATION PROJECT:  
HANDICAPPED COMPONENT

PROFESSIONAL COMPETENCIES AND ASSESSMENT CRITERIA  
FOR ADMINISTRATORS AND TEACHERS OF  
VOCATIONAL EDUCATION PROGRAMS IN FLORIDA

Program of Vocational Education  
Florida State University  
Tallahassee, Florida 32306

Dr. Robert E. Andreyka

The project reported herein was conducted pursuant to a grant from the Division of Vocational-Technical Education, Florida Department of Education. Contractors undertaking such projects are encouraged to express freely their professional judgements in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent the official position or policy of the Florida Department of Education.

## FOREWORD

The competency-based teacher education (CBTE) movement is being explored as a viable alternative to the traditional time-based, course oriented approach to teacher education. The field of vocational-technical teacher education has been involved in CBTE for some time. Several states and teacher education institutions are developing and implementing competency-based programs aimed at preparing and certifying professionally competent vocational educators at various levels. Florida's commitment to competency-based vocational teacher education is well-known.

In an effort to promote CBTE for vocational education, the Florida Department of Education, Division of Vocational Education, funded the initial phase of an exemplary competency-based vocational teacher education project at Florida State University. This project, called Project ACTIVE, is aimed at developing a viable competency-based approach to preparing vocational teachers, administrators, supervisors, and related professionals.

Several individuals have contributed significantly to the progress of this project. Mr. Joe Mills, Director of Vocational Education, Division of Vocational Education, Florida State Department of Education, and Dr. Kenneth Eaddy, Chief, Bureau of Vocational Research, Dissemination and Evaluation, have demonstrated their personal and professional commitments to the competency-based approach. Their support and leadership have made this project possible.

The Handicapped component of the project had several contributors. The project staff wishes to acknowledge the valuable contribution made by jury members who validated preliminary competency statements and assessment criteria. Their input has added greatly to the validity of the project findings. The reader should refer to pages 28 and 46 for a complete listing of jury members. Dr. William Waruo, Industrial Arts, Florida State University, assisted with the handicapped component of the project. Finally, vocational educators throughout Florida who responded to the survey instrument are gratefully acknowledged.

Robert E. Andreyka  
Project Director & Program  
Leader  
Vocational Education  
Florida State University

OE 008 346

This report is one of a series that focuses on the competency and criteria identification phase of the Exemplary Competency-Based Vocational Teacher Education Project at Florida State University. Each report covers one of the teaching, leadership, or special needs components within the project. This series of reports is listed below:

Report No.

TEACHING COMPONENTS

1. COOPERATIVE VOCATIONAL EDUCATION
2. INDUSTRIAL ARTS (competency ident. only)
3. TRADE AND INDUSTRIAL (also delivery system)
4. VOCATIONAL BUSINESS EDUCATION

LEADERSHIP COMPONENTS

5. ADMINISTRATION/SUPERVISION
6. CAREER EDUCATION
7. RESEARCH AND EVALUATION

SPECIAL NEEDS COMPONENTS

8. DISADVANTAGED
9. HANDICAPPED

## TABLE OF CONTENTS

|                                                                       |     |
|-----------------------------------------------------------------------|-----|
| FOREWORD . . . . .                                                    | iii |
| LIST OF TABLES . . . . .                                              | vii |
| LIST OF FIGURES . . . . .                                             | vii |
| OVERVIEW . . . . .                                                    | 1   |
| COMPETENCY-BASED VOCATIONAL TEACHER EDUCATION . . . . .               | 3   |
| Origin of the CBTE Movement . . . . .                                 | 3   |
| Need for Competency-Based Vocational<br>Teacher Education . . . . .   | 4   |
| Competency-Based Vocational Teacher<br>Education Programs . . . . .   | 5   |
| Competency-Based Vocational Teacher<br>Education in Florida . . . . . | 7   |
| EXEMPLARY CBTE PROJECT AT FLORIDA STATE UNIVERSITY . . . . .          | 9   |
| Goals and Objectives . . . . .                                        | 9   |
| Conceptual Model . . . . .                                            | 10  |
| Competency and Criteria Identification<br>Phase . . . . .             | 15  |
|                                                                       | 17  |
| HANDICAPPED COMPONENT . . . . .                                       | 17  |
| PART I--COMPETENCY IDENTIFICATION PHASE . . . . .                     | 19  |
| CHAPTER                                                               |     |
| 1. Introduction--Competency Identification<br>Phase . . . . .         | 19  |
| 2. Review of Related Research . . . . .                               | 23  |
| 3. Methodology for Identifying Competencies . . . . .                 | 27  |
| 4. Findings and Discussion--Competencies . . . . .                    | 31  |
| 5. Conclusions . . . . .                                              | 41  |

|                                                   |    |
|---------------------------------------------------|----|
| PART II--CRITERIA IDENTIFICATION PHASE . . . . .  | 43 |
| 6. Methodology for Identifying Criteria . . . . . | 45 |
| Need . . . . .                                    | 45 |
| Purpose . . . . .                                 | 45 |
| Validation by Jury . . . . .                      | 46 |
| 7. Findings--Criteria . . . . .                   | 49 |
| APPENDIXES . . . . .                              | 63 |
| BIBLIOGRAPHY. . . . .                             | 87 |

## LIST OF TABLES

| TABLE                                                                                                    | <u>Page</u> |
|----------------------------------------------------------------------------------------------------------|-------------|
| 1. Percentage of Handicapped Students According to the Categories of Their Handicaps . . . . .           | 20          |
| 2. Percentage of Handicapped Students Receiving Special Education Services . . . . .                     | 20          |
| 3. Florida's Exceptional Students Program 1973-74 . . . . .                                              | 21          |
| 4. Number of Students on Waiting Lists For Florida's Public School Exceptional Student Programs. . . . . | 22          |
| 5. Sample Included in the Study. . . . .                                                                 | 27          |
| 6. Questionnaire Returns . . . . .                                                                       | 31          |
| 7. Age of Respondents (%) . . . . .                                                                      | 32          |
| 8. Sex of Respondents (%) . . . . .                                                                      | 32          |
| 9. Number of Years in Vocational Teaching (%) . . . . .                                                  | 33          |
| 10. Number of Years in Present Position (%) . . . . .                                                    | 33          |
| 11. Highest Degree Held (%) . . . . .                                                                    | 34          |
| 12. Importance Ratings of Competencies by Vocational Teachers and Administrators . . . . .               | 35          |
| 13. Important Competencies Common to Administrators and Teachers . . . . .                               | 39          |
| 14. Assessment Criteria for Competencies . . . . .                                                       | 40          |

## LIST OF FIGURES

### FIGURE

|                                                |    |
|------------------------------------------------|----|
| 1. CBTE Conceptual Model . . . . .             | 11 |
| 2. Elements of CBTE Conceptual Model . . . . . | 12 |

# **OVERVIEW**

## OVERVIEW

### COMPETENCY-BASED VOCATIONAL TEACHER EDUCATION

Very few movements in education have received more widespread attention than the competency-based teacher education (CBTE) movement. Houston and Howsam (1972) reported that rarely, if ever, has any movement swept through teacher education so rapidly or captured the attention of so many in so short a time as has the competency-based movement. Already well underway, the approach offers promise of renovating and regenerating teacher education. Equally significant, the authors added, it appears probable that it will do so in record time.

For those who doubt whether competency-based teacher education is with us to stay, the following sampling of national involvement in CBTE may be somewhat surprising (Andreyka and Blank, 1976):

- over 30 states report either legislative/administrative support for CBTE or are studying the concept seriously;
- nearly a hundred teacher education institutions report either "total" CBTE programs or alternative programs;
- there are at least 20 national consortia, institutes, centers or other groups whose primary or major function is the promotion of the CBTE movement; and
- literally hundreds of articles, position papers, monographs and other publications dealing specifically with CBTE appear monthly.

It seems, then, that much of the time we now spend philosophizing and debating the relative merits and demerits of CBTE and whether it will survive should, perhaps, be directed toward implementing the concept and making it work.

#### Origin of the CBTE Movement

Like any major educational trend, it is impossible to establish the exact date marking the beginning of the competency-based teacher education movement. The concept seems to have evolved slowly and steadily during the past two decades. Schmieder (1973) has identified some of the motivational forces that appear to have given impetus to the CBTE movement:

1. Introspection of the Educational Community
2. Emphasis on accountability

3. Increased focus of political action on fiscal issues
4. Management organization movement
5. Press for personalization and individualization of education
6. Desire of state education departments to develop more effective certification processes and standards.

Elam (1971) in one of the earliest in-depth looks at the competency-based teacher education movement, placed the origins of CBTE somewhat earlier. He pointed out that CBTE predates the current rage for accountability and most probably has its roots in the general conditions present in society and the institutional responses to them characteristic of the Sixties.

The vocational teacher education field has been involved in the CBTE movement for some time. Early studies by Walsh (1960), Courtney (1968), Crawford (1967), Ratner (1967) and others were aimed at identifying competencies important to vocational and technical teachers and related personnel. The comprehensive competency-based vocational teacher education research and development project at the Center for Vocational Education (Cotrell, et al, 1971) was begun in 1967, before the development of much of the current popularity of CBTE.

#### Need For Competency-Based Vocational Teacher Education

For many years vocational and technical teachers, administrators, supervisors and related personnel have received their professional preparation in traditional university-based programs. These programs usually consist of a series of courses focusing upon the acquisition of knowledge and which culminate in a paper and pencil evaluation. This course-oriented approach for preparing teachers and individuals in leadership roles is coming under criticism for not meeting the real needs of practitioners (Finch and Hamilton, 1975; Norton et al, 1975).

Among the shortcomings associated with the traditional approach are:

1. Objectives are vague or general
2. Program is content and textbook-oriented
3. Assessment is only cognitive in scope
4. Content and objectives are based upon tradition

5. Program focuses on general principles but seldom relates these to the problems faced by educators
6. Instruction is not tailored to the needs of individuals
7. The end product is not systematically evaluated
8. Minimum standards of acceptable performance are not established.

Finch and Hamilton (1975) reported that many of the professional courses completed by vocational and technical teachers are offered in random sequence and often focus on principles and techniques related only generally to the teacher's actual role in the classroom and laboratory. Schaefer (1971) reported that present vocational teacher education programs amount to nothing more than small encounters with a large and complex personnel development problem.

#### Competency-Based Vocational Teacher Education Programs

An increasing number of vocational-technical teacher education programs are exploring the competency-based approach for preparing teachers, administrators, supervisors, and related professionals. Some programs have primarily focused on the professional needs of teachers in particular service areas while others have addressed the professional needs of vocational-technical educators in several service areas and levels. While space does not permit a detailed review of competency-based vocational-technical teacher education programs currently in operation, the following does give a brief overview of some CBTE research and development activities which have focused on identifying competencies needed by vocational educators at various levels and in several service areas.

A study by Courtney (1968) identified the need for a common core approach to competency identification. Courtney reported that much of the controversy surrounding teacher education deals with determining what should be included in programs. A second study (Courtney and Halfin, 1969) involved the identification of professional competencies needed by instructors in vocational agriculture, home economics, trade and industrial education, distributive education, and business education. Forty randomly selected teachers from four different states participated in the study. An important aspect of this research was the use of factor analysis for grouping competencies into categories.

Spaziani and Courtney (1971) conducted a research project in which secondary and community college teachers were asked

to rate 99 professional competencies. The rating scale used was an adaptation of Bloom's taxonomy of educational objectives (Bloom, 1956). Competencies were rated according to level of proficiency needed by teachers: knowledge, comprehension, application, analysis, synthesis, or evaluation.

Terry, Thompson, and Evans (1972) completed a study in Illinois in which 107 vocational educators from all service areas were assembled and asked to identify and categorize professional competencies needed by vocational and technical teachers. Four-hundred-seventy-seven competencies were identified in this manner.

A comprehensive common core CBTE research and development project was conducted by the Center for Vocational Education at The Ohio State University (Cotrell et al., 1971). First, professional competencies (performance elements) common to teachers in all vocational service areas were identified as well as additional competencies important to teacher-coordinators in cooperative vocational education programs. Performance-oriented objectives were then developed for each performance element identified. A total of 384 performance elements were identified by the Center's research.

Next, self-instructional curricular materials based upon the competencies previously identified were developed. Modules were developed that were designed to help teacher trainees attain specific professional competencies. More than 100 separate modules in 10 categories were developed that incorporated the 384 performance elements (Center for Vocational Education, 1974).

These competency-based teacher education modules underwent advanced testing at Colorado State University, Rutgers University, and Florida State University during 1975 (Center for Vocational Education, 1975). Ten additional test sites were added during the Fall of 1975, one in each of the 10 United States Office of Education regions (Hamilton, 1975).

Volger and Patton (1974) reported on a department-wide CBTE program in the University of Michigan occupational educational program. This program was designed to prepare trade and industrial, health occupations, vocational business, and distributive education teachers with generic professional competencies. This program began in 1971 and is now fully implemented. Competencies originally identified by the Center for Vocational Education constituted the basis of the program.

### Competency-Based Vocational Teacher Education In Florida

There has been a considerable amount of research and development activity in competency-based vocational-technical teacher education in Florida. In its 1974 report, the Florida State Advisory Council for Vocational-Technical Education recommended that efforts to identify unique competencies needed by teachers in specific vocational program areas be continued and upgraded (Florida Department of Education, 1974). It was reported that during fiscal year 1974 work was begun in State Department funded projects to identify unique professional competencies in home economics, industrial, and diversified education.

In a publication entitled The Florida Program For Improving the Training, Evaluation, and Licensure of Educational Personnel (Florida Department of Education, 1971) it was reported that the executive committee of the Teacher Education Advisory Council requested that a plan be devised to improve teacher education and certification in this state. Current research and development activities reported included:

1. Develop comprehensive statements of teacher competencies and develop instruments for assessing them
2. Conduct research to demonstrate the relationship between teaching competency and student learning
3. Identify and produce material for training teachers and other educational personnel in specified competencies
4. Assist institutions and school districts with staff development for teacher training personnel.

A study was conducted in 1972 (Lima) to identify competencies important to Florida's business education teachers. In 1974, a study was conducted in Florida aimed at identifying common and unique competencies for teacher coordinators in work experience and diversified cooperative training programs. A study completed in 1975 (Perkins) identified 164 professional competencies important to Florida's trade and industrial education teachers.

Phase I of a competency-based teacher education project aimed at trade and industrial education teachers has been completed in the state of Florida (Andreyka, 1975). This program has identified 32 entry level competencies needed by that state's T & I teachers. Also identified were assessment criteria that may be used to assess mastery of the competencies. The project also involved the review of samples of competency-based teacher education instructional materials available from

throughout the country. A wide variety of individuals was involved in competency and criteria identification and validation. Participating were trade and industrial education teachers, administrators and supervisors, teacher educators, state department representatives, Board of Regents representative, and the Florida Industrial Education Association.

Phase II of this project addressed four major issues involved in implementing CBTE. These issues were implementation of CBTE in the university setting, development of a viable preservice and inservice program and the identification of alternative funding sources for competency-based teacher education.

A study completed in 1976 (Blank) identified over 100 professional competencies important to community college technical instructors in engineering, health, distributive, business, and public service technologies in Florida.

## EXEMPLARY COMPETENCY-BASED VOCATIONAL TEACHER EDUCATION PROJECT AT FLORIDA STATE UNIVERSITY

Florida State University as well as other universities in Florida and throughout the nation currently prepare teachers and related professionals using the traditional course-oriented approach. These traditional teacher education programs usually vary in content relevance and overall program quality. The FSU Competency-Based Vocational Teacher Education Project was initiated because of feelings by many vocational educators that traditional university courses might not be meeting the real needs of vocational teachers and related professionals.

The Exemplary Competency-Based Vocational Teacher Education Project at Florida State University is aimed at developing and implementing a totally competency-based professional vocational education program. Called Project ACTIVE (Attaining Competence for Teaching In Vocational Education), the project's intention is to overcome many of the shortcomings of the traditional course-oriented approach to preparing professionally competent vocational and technical teachers and related personnel. This is an exemplary project and could serve as a research base for developing a CBTE model for other Florida universities and also other states.

This report is one of a series and it focuses on one component of the project. Other reports have been prepared describing the other teaching, leadership and special needs components within the project. This series of reports covers the initial phase of the project: *Competency and Criteria Identification*. Listed below is the report number for each component.

### Goals and Objectives

The long-range goal of the project is to develop an exemplary competency-based vocational teacher education and leadership development program. The project is aimed at meeting the professional needs of the following groups, both at the preservice and inservice levels:

#### Report No.

#### TEACHING COMPONENTS

1. Cooperative Vocational Education
2. Industrial Arts
3. Trade and Industrial
4. Vocational Business Education

#### LEADERSHIP COMPONENTS

5. Administrators/Supervisors
6. Career Education Specialists
7. Researchers

#### SPECIAL NEEDS COMPONENTS

8. Disadvantaged
9. Handicapped

The research effort was designed to accomplish the following objectives:

- \*\*1. Identification and validation of professional competencies (skills) important to vocational teachers and professional support personnel.
- \*\*2. Identification and validation of specific assessment criteria for assessing mastery of competencies.
3. Development and/or adoption of performance-based, self-paced learning packages designed to help participants master important competencies.
4. Development of evaluation instruments and strategies providing for objective assessment of competency mastery while the participant is performing in an actual school situation.
5. Implementation of a competency-based program in a traditional university setting.
6. Development of instruments and strategies for overall program evaluation.

\*\*The first two objectives have been accomplished and they are the focus of this series of reports.

#### Conceptual Model

The first step in the exemplary project was to develop the conceptual framework of the CBTE program. After reviewing various conceptual models of CBTE programs (Elam, 1971; Houston and Howsam, 1972; Norton et al, 1975) the project staff developed a model which would be suitable for vocational-technical teacher education (Andreyka and Blank, 1976). Figure 1 shows a schematic of this model while Figure 2 explains each element of the model in more detail.

Figure 1

## CBTE CONCEPTUAL MODEL

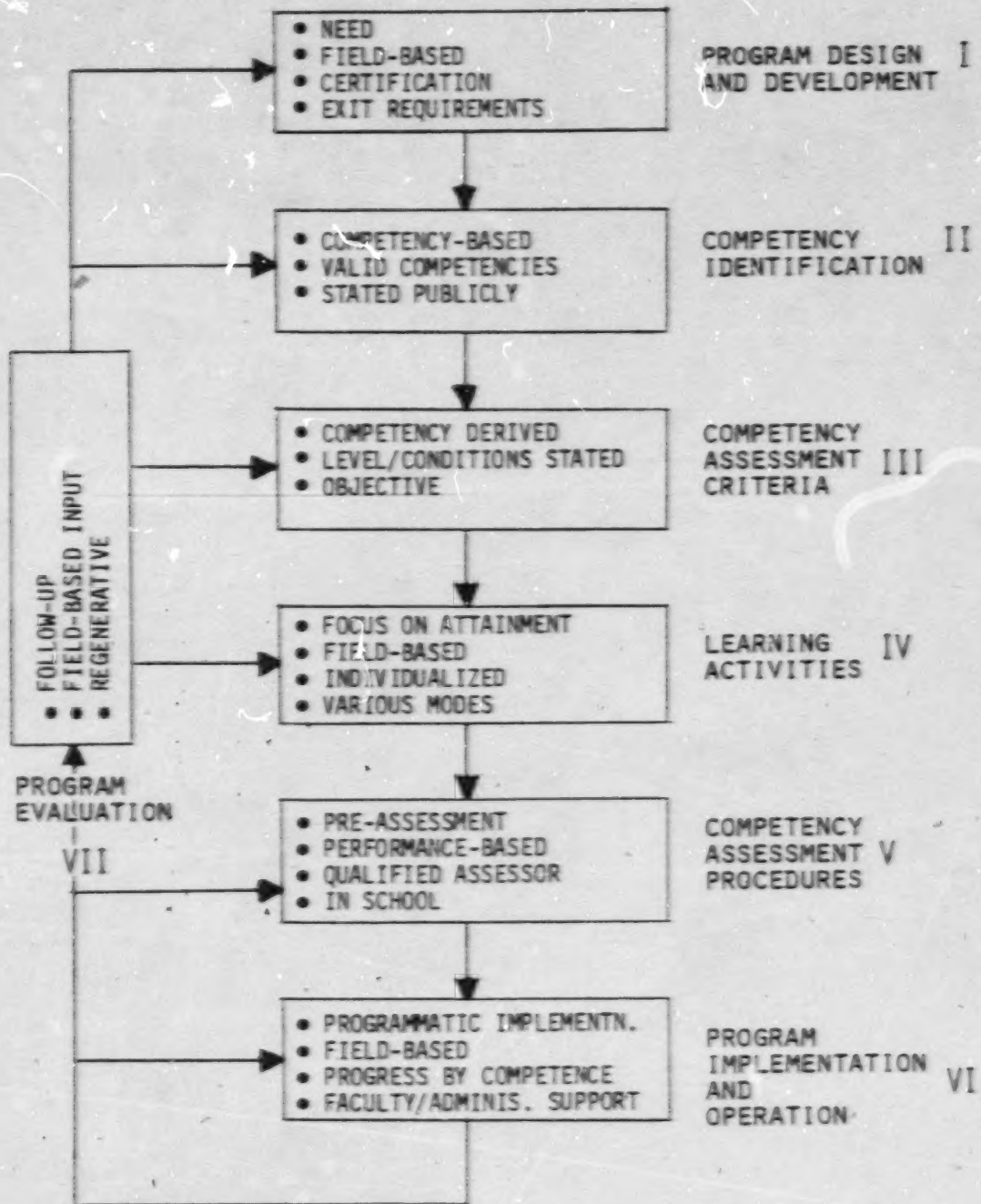


Figure 2

Elements of CBTE Conceptual Model

I. Program Design and Development

- A. *Need Identification.* A thorough statement should be provided on the need for the program, including its advantages over the present program and benefits to prospective teachers and their potential students.
- B. *Field Based Design Effort.* Evidence should be available that input was received from teachers, state department personnel, parents, students, principals, advisory committees and professional organizations during program design.
- C. *Certification.* Program should produce certifiable individuals; certification personnel should be consulted to allow for certification by mastery of competencies rather than by course completion.
- D. *Emphasis on Exit Requirements.* The program should place primary emphasis on recording mastery of competencies and eliminating non-relevant entrance requirements.

II. Competency Identification

- A. *Basis for Program.* The program should be based solely on appropriate prespecified competencies that have been identified as being important to teachers.
- B. *Valid Competencies.* Competencies should be validated by consensus of opinion of qualified experts, or sound research base such as task analysis, teacher poll, literature search or other.
- C. *Statement of Competencies.* Teacher trainees should be able to demonstrate, whenever possible, the mastery of competencies as they are stated, and competencies should be made public in advance.

III. Competency Assessment Criteria

- A. *Derived from Competencies.* Criteria for assessing competency mastery should be based solely on the competencies themselves.
- B. *Expected Level of Performance and Conditions.* The

expected level of performance for successful mastery and under what conditions should be stated and made public in advance.

- C. *Objective Assessment Criteria.* Assessment criteria should be specific and objective and based on observable performance by teacher trainee.

#### IV. Learning Activities

- A. *Focused on Competency Attainment.* Learning activities should be focused solely on helping teacher trainees master pre-specified competencies.
- B. *Field Based.* Learning activities should be based on actual teaching conditions wherever practical.
- C. *Different Modes Available.* Various modes of instruction should be utilized including mediated instruction.
- D. *Individualized Instruction.* Self-instructional and self-paced instruction should be available where practical.

#### V. Competency Assessment Procedures

- A. *Pre-Assessment.* Opportunities should be available for pre-assessment for diagnostic purposes and to permit credit for competencies already mastered.
- B. *Based on Performance.* Competency mastery should be based primarily on teacher-trainees performance and/or desired change in behavior of students.
- C. *Setting.* Assessment should be carried out in an actual school setting whenever practical.
- D. *Qualified Assessor.* Assessment should be carried out by one or more qualified resource persons who have teaching experience.

#### VI. Program Implementation and Operation

- A. *Programmatic Implementation.* Total program should be competency based rather than course by course substitution.
- B. *Faculty/Administrative Support.* Program should have necessary faculty and administrative support to function on a competency based format.

C. *Field Based.* Program implementation should involve teachers, state department, parents, principals, professional organizations, students and others.

D. *Progress by Competence.* Teacher trainees should proceed through program based on competency mastery rather than by course or time frame.

#### VII. Program Evaluation

A. *Follow-up.* Follow-up procedures should be established to determine if graduates are as effective as graduates from other programs.

B. *Field Based.* Program evaluation should receive input from various sources in the schools.

C. *Used for Program Improvement.* Program evaluation data should be used directly to improve the program.

### Competency and Criteria Identification Phase

This series of reports covers the initial phase of the project which identified professional competencies important to practitioners in each component of the project. Also identified were specific assessment criteria that may be used to assess mastery of the competencies. Subsequent phases of the project will be based upon these professional competencies identified and validated as important to vocational teachers, administrators and related support personnel throughout Florida. Professional competencies important to practitioners within each area of the project were identified, along with assessment criteria, by surveying vocational educators in the field.

Preliminary lists of competencies were identified in each component within the three major areas of the project--teaching, leadership and special needs. Each preliminary competency list was submitted to a jury consisting of persons with expertise in the appropriate area, for preliminary validation. Jury members had broad latitude to revise, add, or delete competency statements.

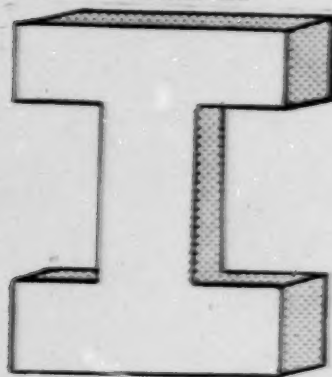
Based on comments of jury members, the competency statements were revised, compiled on a survey instrument, and submitted to a sample of practitioners in the field for each component of the project with the assumption that teachers and other professionals were qualified to identify competencies most important to them.

These survey instruments were mailed to vocational and technical teachers, administrators, supervisors, researchers, career education specialists and cooperative vocational education teacher-coordinators. These individuals rated each competency as to its importance to them in their positions. Data from returned instruments were analyzed to identify significant differences among sub-groups within each component.

For each competency validated as important, specific, objective assessment criteria were written that may be used by an evaluator to assess whether individuals have mastered the competency. Preliminary criteria statements were written for each competency, submitted to a jury comprised of individuals with expertise and experience in that particular area, and revised based upon a synthesis of jurors' comments.

Later phases of the project will include the adoption and development of learning materials, development of assessment strategies and instruments, implementation in the university setting, and development of program evaluation techniques. This report describes the competency and assessment criteria identification phase for one component within the project. Additional reports have been prepared describing the competency and criteria identification phase of the other teaching, leadership and special needs components.

PART



**HANDICAPPED COMPONENT—**  
**Competency Identification**

## CHAPTER 1

### INTRODUCTION - COMPETENCY IDENTIFICATION PHASE

The 1963 Vocational Education Act and the 1968 Amendments challenged vocational educators to make a concerted effort at better meeting the vocational needs of students with physical, mental, emotional, and other handicaps.

A handicapped person is defined by the Florida State Plan (Florida Department of Education, 1974-75) as "a typical physical, mental, or behavioral condition that adversely affects the performance of an individual." The Florida State Plan (1974-75) defines Vocational-Technical Education programs for the handicapped as "Vocational-Technical Education programs for persons who are mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, crippled or who have other health impairments, which, by reasons thereof, require special educational services. The federal government and many states have encouraged the development of vocational programs and instructional materials designed to help handicapped students gain vocational and technical skills.

#### Need

The planning and evaluation staff of the U.S. Department of Health, Education, and Welfare's Bureau of Education for Handicapped said in August, 1970, that there were an estimated 7,083,500 handicapped children among the 75,000,000 children in the United States in the age group of 0-19 years old. These figures, which include pre-school children, indicate that slightly more than 10 percent are handicapped. The Bureau of Education for the Handicapped prepared estimated percentages of school children according to the categories of their handicap. The percentages are shown in Table 1.

Table 2 shows data gathered by the U.S. Department of Health, Education, and Welfare's Bureau of Education for the Handicapped (1970) concerning the percentage of school-age handicapped children who are receiving special educational services. These figures reflect the overall picture of the number of American handicapped youth. The State of Florida has conducted a statewide investigation for determining the types of preparation needed to better equip teachers with the necessary classroom management knowledge. However, educating the handicapped or exceptional student is a monumental task. The Bureau of Education for Exceptional Students, Florida State Department of Education, prepared the data shown in Table 3.

Table 1  
Percentage of Handicapped Students According  
To the Categories of Their Handicaps<sup>a</sup>

| Type of Handicap            | Percentage of School Children |
|-----------------------------|-------------------------------|
| Speech Impaired             | 3.9                           |
| Emotionally Disturbed       | 2.8                           |
| Mentally Retarded           | 2.3                           |
| Learning Disabled           | 1.8                           |
| Hard of Hearing             | 0.9                           |
| Deaf                        | 0.075                         |
| Crippled or Health Impaired | 0.5                           |
| Visually Impaired           | 0.1                           |
| Multihandicapped            | 0.06                          |
| Total                       | 10.035 percent                |

<sup>a</sup> U. S. Department of Health, Education, and Welfare, Bureau for the Handicapped, 1968, 1969, 1970, Final Reports.

Table 2  
Percentage of Handicapped Students Receiving  
Special Education Services<sup>a</sup>

| Type of Handicap         | Total Number | Percent Receiving Services |
|--------------------------|--------------|----------------------------|
| Mentally Retarded        | 2,362,737    | 52                         |
| Hard of Hearing and Deaf | 116,454      | 21                         |
| Speech Impaired          | 2,190,589    | 51                         |
| Visually Handicapped     | 66,679       | 34                         |
| Emotionally Disturbed    | 767,108      | 13                         |
| Crippled                 | 192,642      | 33                         |
| Other Health Impaired    | 1,089,817    | 15                         |
| Multihandicapped         | 35,918       | 26                         |
| National Totals          | 6,009,966    | (2,259,393)-38 percent     |

<sup>a</sup> U.S. Department of Health, Education, and Welfare, Bureau of Special Education for the Handicapped, Final Report, 1970.

Table 3

Florida's Exceptional Students Program<sup>a</sup>  
1973-1974

| Program Summary                | Teacher | Teacher Aides | Students |
|--------------------------------|---------|---------------|----------|
| Educable Mentally Retarded     | 1,869   | 65            | 28,677   |
| Trainable Mentally Retarded    | 431.5   | 192           | 4,435    |
| Physically Handicapped         | 159.5   | 37            | 1,690    |
| Downbound & Hospitalized       | 141.5   | 8             | 5,364    |
| Speech, Hearing & Language     | 580.6   | 8             | 54,611   |
| Deaf                           | 189     | 34            | 1,734    |
| Vision                         | 78.3    | 7             | 1,823    |
| Gifted                         | 288     | 8             | 28,603   |
| Emotionally Disturbed          | 351     | 82            | 6,190    |
| Specific Learning Disabilities | 717     | 84            | 19,942   |
| Socially Maladjusted           | 176     | 13            | 2,114    |
| Juvenile Shelters              | 55      | 8             | 918      |
| Comprehensive                  | 182     | 23            |          |
| Special Teachers               | 34      |               |          |
| Supervisory                    | 266     |               |          |
| Special Services               | 177.5   |               |          |
| Total                          | 5,649.9 | 573           | 146,400  |

<sup>a</sup>Florida State Department of Education, Bureau for Exceptional Students, Annual Reports, 1973-74.

Information that follows was obtained from the Bureau of Education for Exceptional Students, Annual Report 1973-74. The Exceptional Student Program is part of the Florida Educational Finance Program (FEFP). It is funded by a combination of state and district (county) funds, plus some federal funds. During the 1973-74 school year, the Exceptional Student Program generated 38,938 full-time equivalent students (FTE) from a total of 1,560,238 FTE for all programs--exceptional, vocational and basic. Applying the cost factors for special programs, the Exceptional Student Program generated 130,697 which out-weighted FTE for a total WFTE of 1,888,209 for all programs. Approximately 70 percent of the funds were from state sources and 30 percent were from local sources. The percentage of state funds compared to local funds may vary from district to district.

Although the Exceptional Student Program funding, the staffing or personnel, and the student population appear to be substantial there is still a long waiting list. The public school programs for the exceptional reported numbers of students on these waiting lists which are reflected in Table 4. It appears as if there is a large number of handicapped persons in the United States and in Florida. Many of these persons would benefit from vocational or

technical training. In order to successfully meet the career oriented needs of handicapped students, there is a need for programs to prepare vocational instructors with the competencies needed to adequately serve the needs of these students.

Table 4

Number of Students on Waiting Lists  
For Florida's Public School Exceptional Student Programs<sup>a</sup>

| Type of Handicap               | Number of Students |
|--------------------------------|--------------------|
| Educable Mentally Retarded     | 1,701              |
| Trainable Mentally Retarded    | 96                 |
| Socially Maladjusted           | 2,349              |
| Emotionally Disturbed          | 2,096              |
| Specific Learning Disabilities | 7,569              |
| Visually Handicapped           | 37                 |
| Speech Impaired                | 7,608              |
| Deaf                           | 107                |
| Physically Handicapped         | 133                |
| Total                          | 16,695             |

<sup>a</sup>Florida State Department of Education, Bureau of Education for Exceptional Students, Annual Report, 1974-75.

### Purposes

It has been suggested in recent years (Davis and Ornstein, 1969) that teacher education programs have not been responsive to the needs of the handicapped student. Products of conventional teacher education programs appear to be meeting the needs of handicapped students with marginal success.

The purpose of this study was to identify professional competencies important to vocational teachers, administrators and supervisors serving handicapped students in Florida. A second purpose was to develop assessment criteria that may be used to evaluate mastery of these competencies.

## CHAPTER 2

### REVIEW OF RELATED RESEARCH

The review of related research focused on the field of competency-based vocational-technical teacher education for persons instructing the handicapped student. A variety of sources was reviewed to identify professional competencies that might be directly or indirectly related to the preparation of teachers in vocational-technical areas dealing with the handicapped student in a regular school program.

In July, 1974, the School of Education at Indiana University at Bloomington presented a study examining the educational programs, supported by the Indiana State Board for Vocational and Technical Education, for the disadvantaged and handicapped which made recommendations regarding future education for professional personnel involved in these programs. It was suggested that vocational teachers of the disadvantaged and handicapped can benefit from teacher education; and that professional development for vocational teachers of the disadvantaged and handicapped must be based on the needs of students, teachers, and programs taking into consideration the different student populations served and the expressed needs of teachers.

The Bureau of Education for the Handicapped in December, 1974, developed through the Department of Counseling and Personnel Services at Missouri University at Columbia, an annotated bibliography of over 150 commercially available career education materials for educable retarded (EMR) students in the second of a series of working papers from Project Price (Programming Retarded in Career Education). Entries are grouped under 22 competencies considered essential for community adjustment, which fall under three primary curriculum areas: daily living skills (such as communicating appropriately with others), occupational guidance and preparations (such as exhibiting necessary work habits).

The Kansas State Department of Education, Division of Vocational Education at Topeka, presented objectives and services of the three-year Kansas Special Vocational Program (SVP) for handicapped youth and adults. The SVP primary objective was to provide pre-employment educational services to 150 high school handicapped individuals, with job placement for 50 individuals. The report covers the following SVP aspects: community advisory membership; program staffing and facilities; districts and agencies served; referral, orientation, and work evaluation procedures, employment orientation; placement preparation and follow-up, related supplementary services and public relations.

The United States Office of Education in October, 1974, presented the final report (1974) of an assessment of vocational education programs for the handicapped under Part B of the 1968 Amendments to the Vocational Education Act which included the requirements that 10 percent of each state's basic vocational education grant be expended exclusively for the handicapped.

Presented was the 1974 work-study program curriculum guide from Fairfax County, Virginia, for mildly retarded secondary school students. The vocational program's four-fold goal was to develop curriculum materials, train personnel, develop instructional techniques, and provide logistics support to future employment potential of students. The program description provides charts which correlated the goals to the following objectives: improving communication skills and developing personal/social and specific occupational skills.

In August, 1974, the Bureau of Education for the Handicapped sponsored through Vermont University's Department of Vocational Education and Technology a program focusing on a preservice and inservice Diversified Occupational (DO) training program to prepare teachers in vocational and practical arts education for the educable mentally retarded (EMR) high school pupils. Described are the following topics: program context (which emphasized DO programs in 15 area vocational centers); program goals and activities (such as identification and training of personnel); selection of instructional content (as outlined in a teaching competencies checklist); instructional units (with two sample lectures provided) delivery system development, including workshops and learning activities package (LAPS); implementation of undergraduate and graduate course concentrations in DO; research on problems such as the development of instructional materials for EMR adolescents; a project evaluation.

This study is a collection of readings about special needs children in vocational education. The study has been prepared as a sourcebook for courses concerned with the special needs teachers, for teacher educators interested in understanding more about the handicapped and disadvantaged students and competencies needed by those who teach them, and for the current or potential vocational educator who has little background in the education of handicapped and disadvantaged students.

The Michigan State Department of Education (1974), Special Needs Program, developed a series of vocational development

units for the handicapped. This document provides an overview of the program, its development, and the purposes of each instructional unit. Each of the 10 different units describes a particular occupational cluster. The vocational or special education teacher is guided through the listing of behavioral task knowledges/task skills, instructional methods, instructional materials, and task-related competencies for each occupational cluster.

In 1973 the Bureau of Adult, Vocational, and Technical Education sponsored a series of workshops planned and conducted by the Area Manpower Institutes for the Development of Staff (AMIDS), a network of training centers. The goal of the project was to train a nucleus of vocational educators in curriculum preparation and modification of instructional material to enable disadvantaged and handicapped students to achieve success in career preparation programs. More than 1,200 vocational educators across the country participated in one-week workshops designed to achieve the project goal with the hope that this "nucleus" would train and assist colleagues in developing relevant, performance-based curriculum and learning materials.

The 1971 Florida State Department of Education presented "The Florida Program for Improving the Training, Evaluation, and Licensure of Educational Personnel." This program was designed to move the state toward competency-based programs of teacher education, in which program decisions for trainees are made on the basis of demonstration by those trainees of pre-specified competencies. The strategy proposed had two major facets: to provide greater flexibility in the operation of local education programs and to make local personnel accountable for results. A variety of teacher education programs were used, and eventually teachers will be required to master only those competencies which had been demonstrated by research to relate to pupil learning.

A review of literature pertinent to teacher preparation of the handicapped pupil suggests that proper identification of these pupils is of utmost importance. Paul Andereck, 1973, (Bureau of Education for the Handicapped) considers a learner handicapped when the learner's behavior is sufficiently deviant to make the learning experience totally or largely unprofitable. We call the learner "disadvantaged" if the deviant behavior can be attributed to environmental factors. If the deviant behavior can be attributed to physical incapacities, which are sometimes compounded by an inappropriate environment, we call the learner "handicapped."

In many cases, an instructor may feel he or she is dealing with several problems, but specific terminology helps revise the situation complexity. This is the case when

dealing with the handicapped student. In education a student is usually considered exceptional if he deviates to a degree that it hinders his development in the ordinary classroom environment, thus requiring the need for special education. The major deviations can be organized into at least five categories. Kirk (1972) listed them as follows:

1. Communications Disorders
  - a. Learning Disabilities
  - b. Speech Handicap
2. Mental Deviations
  - a. Intellectually Gifted
  - b. Mentally Retarded
3. Sensory Handicaps
  - a. Auditory Handicaps
  - b. Visual Handicaps
4. Neurologic, Orthopedic, and Other Health Impairments
5. Behavioral Disorders.

## CHAPTER 3

### METHODOLOGY FOR IDENTIFYING COMPETENCIES

The methodology utilized for the study was a descriptive survey using a questionnaire distributed by mail to vocational directors, administrators and teachers throughout Florida during 1975-76.

#### Selection of the Subjects

The population for this study included all Florida county vocational directors, vocational administrators/supervisors/coordinators, vocational workshop participants and Florida vocational teachers in schools identified as applying for funds for meeting the needs of handicapped students in all vocational areas.

The sample selected to receive the survey questionnaire was from the population above. The sample included vocational teachers in Florida Schools which applied for state funds for developing programs for the handicapped. It also included participants at a July, 1973, workshop on "Industrial Arts for Exceptional Youth." Table 5 shows the sample included in the study.

Table 5  
Sample Included In The Study

| Group                                    | N   |
|------------------------------------------|-----|
| County Vocational Directors              | 22  |
| County Level Administrators /Supervisors | 22  |
| Workshop Participants                    | 41  |
| Vocational Teachers                      | 80  |
| Total                                    | 165 |

### Development of the Instrument

A team of three persons was selected by the Florida State University Vocational Education Department for identifying competencies that appeared as important to teacher preparation for educating handicapped students enrolled in vocational education programs in a regular public school setting. One team goal was developing a list of valid, reliable competencies essential to the education of teachers of handicapped students in public school pre-vocational and vocational programs. A second team goal was to categorize this competency list.

A review of the literature was conducted plus Tallahassee area teachers of the handicapped were personally interviewed. A preliminary competency list was compiled from this input.

### Validation by Jury

The preliminary competency list was submitted to a jury comprised of five professional educators from the Tallahassee area. The jurors were asked to make corrections, deletions, and additions to the list which could then be compiled as the survey instrument used in this study. The jurors were:

1. Mr. Thomas Swift, Consultant, Handicapped and Work Study Programs, Department of Education, Tallahassee, Florida
2. Mr. Foster Rossier, Director, Special Education for Leon County, Tallahassee, Florida
3. Mr. Marion Moore, Instructor, Moore Elementary, Tallahassee, Florida
4. Ms. Carol Cline, Instructor, Astoria Park Elementary, Tallahassee, Florida
5. Dr. W.D. Wargo, Associate Professor, Industrial Arts, Florida State University, Tallahassee, Florida.

### Revision of the Instrument

The preliminary list of competency statements was revised, based upon comments from jury members. Items were

added dealing with respondents' backgrounds and present status. Nineteen competency items were included in the final list used for the survey instrument. Also included were eight questions asking personal and professional information of the respondents. The competency items included a rating scale in which the respondents were asked to evaluate each item on the scale (1 = very important to 6 = not important) (see Appendix A).

#### Collection and Analysis of Data

A packet containing the instrument, a cover letter (see Appendixes A - E) and a postage-paid, pre-addressed return envelope was mailed out to the sample in the study which consisted of 193 persons. These included county vocational directors, county level administrators, workshop participants, and vocational teachers.

Approximately four weeks after the initial mailing, additional instruments were sent to all participants along with a cover letter and an additional return envelope to increase the percentage of returns. Data from the returned usable instruments were transferred to punched cards and analyzed by computer. The analysis included rank ordering of the competency statement means for all respondents. Also performed was a t-test to determine whether significant differences existed in the mean importance ratings of the competencies between all administrators and all teachers.

## CHAPTER 4

### FINDINGS AND DISCUSSION - COMPETENCIES

This section presents the findings of the study based on analysis of data from returned instruments.

#### Return Rates

A total of 86 instruments were returned from the 165 that were distributed to the sample group. Returned instruments were examined and three were found to be unusable. The subgroups were chosen in an attempt to obtain a response from a cross section of vocational educators throughout the state of Florida. Table 6 shows the sample of vocational administrators and vocational education teachers included in the study and the percentage of returns from each group.

Table 6  
Questionnaire Returns

| Group          | Distributed | Returned | %  |
|----------------|-------------|----------|----|
| Administrators | 44          | 14       | 32 |
| Teachers       | 121         | 72       | 59 |
| Total          | 165         | 86       | 52 |

#### Professional Data

Eight items were included in the instrument requesting personal and professional information about the background and current professional status of respondents. This data may be useful by providing a profile of administrators and teachers involved with handicapped education programs in Florida.

Table 7 presents the age of respondents. Some 53 percent of the teachers working with handicapped students were between the ages of 20-39.

Table 7  
Age of Respondents (%)

| Age     | Teachers | Administrators | All Respondents |
|---------|----------|----------------|-----------------|
| 20 - 29 | 24       | 0              | 21              |
| 30 - 39 | 29       | 11             | 27              |
| 40 - 49 | 19       | 22             | 20              |
| 50 - 59 | 24       | 44             | 26              |
| Over 60 | 4        | 22             | 7               |

Table 8 displays the sex of respondents. Men outnumbered women as vocational educators of handicapped students.

Table 8  
Sex of Respondents (%)

| Sex    | Teachers | Administrators | All Respondents |
|--------|----------|----------------|-----------------|
| Male   | 63       | 67             | 63              |
| Female | 37       | 33             | 37              |

Table 9 shows the number of years respondents had worked as teachers or administrators in vocational education. Seventy-two percent of the administrators had worked from 1 to 10 years in their jobs.

Table 9  
Number of Years in Vocational Teaching (%)

| Years   | Teachers | Administrators | All Respondents |
|---------|----------|----------------|-----------------|
| 1- 5    | 11       | 29             | 12              |
| 6-10    | 47       | 43             | 47              |
| 11-15   | 26       | 14             | 25              |
| 16-25   | 9        | 14             | 10              |
| Over 25 | 8        | 0              | 7               |

Table 10 reveals the years administrators and teachers had been in their present positions.

Table 10  
Number of Years in Present Position (%)

| Years | Teachers | Administrators | All Respondents |
|-------|----------|----------------|-----------------|
| 1- 5  | 65       | 44             | 63              |
| 6-10  | 28       | 44             | 30              |
| 11-15 | 7        | 11             | 8               |
| 16-25 | 0        | 0              | 0               |

Table 11 shows the highest degree held by administrators and teachers of handicapped students.

Table 11  
Highest Degree Held (%)

| Degree        | Teachers | Administrators | All Respondents |
|---------------|----------|----------------|-----------------|
| High School   | 4        | 0              | 4               |
| Associate     | 4        | 0              | 4               |
| Bachelor's    | 36       | 0              | 32              |
| Master's      | 49       | 89             | 54              |
| Adv. Master's | 4        | 11             | 5               |
| Doctorate     | 1        | 0              | 1               |

#### Importance of the Competencies

Ninety competencies were included in the instrument which were rated by respondents on the 6 point rating scale. Table 12 shows the mean importance rating of each competency statement on the survey instrument for each group of administrators and teachers. Also shown in Table 12 is the average rank of each item within each group and the average mean and average rank for all groups. Table 12 shows the ranking of competencies from the most important to least important for each group plus the average rank for all groups. Table 13 shows the competency statements that were included in the most important 25 percent for both groups within the study. Some 13 competencies were included in the most important 25 percent.

A t-test was utilized for determining if significant differences existed between the two groups in the rating of the items. From the list of 90 competencies, only four received significantly different ratings at the .05 level or better.

Table 12  
Importance Ratings of Competencies By Vocational Teachers and Administrators

| Rank<br>Avg. Mean | Item | Competency                                                                                                              | Rank/Mean        |                        | t-<br>Value |
|-------------------|------|-------------------------------------------------------------------------------------------------------------------------|------------------|------------------------|-------------|
|                   |      |                                                                                                                         | Teachers<br>N=72 | Administrators<br>N=14 |             |
| 1<br>1.492        | 62   | Establish communications with potential employers of the handicapped.                                                   | 13<br>1.652      | 2<br>1.333             | 1.19        |
| 2<br>1.522        | 8    | Identify needs, interests of the handicapped student.                                                                   | 7<br>1.600       | 4.5<br>1.444           | .62         |
| 3<br>1.526        | 76   | Relate instruction to the world of work.                                                                                | 2<br>1.986       | 13<br>1.667            | -1.02       |
| 4<br>1.532        | 75   | Motivate students.                                                                                                      | 1<br>1.914       | 16<br>1.750            | -1.29       |
| 5<br>1.547        | 79   | Assist students in developing a sense of responsibility.                                                                | 3<br>1.429       | 13<br>1.667            | -.81        |
| 6<br>1.589        | 74   | Develop on-the-job training programs.                                                                                   | 10.5<br>1.623    | 8<br>1.556             | .21         |
| 7<br>1.596        | 72   | Keep abreast of new trends and techniques in teaching the handicapped.                                                  | 12<br>1.638      | 8<br>1.556             | .24         |
| 8<br>1.600        | 73   | Work with teachers in related fields in planning correlated and joint learning requirements and experiences.            | 21<br>1.757      | 4.5<br>1.444           | .91         |
| 9<br>1.603        | 58   | Supervise the safe arrangement of student work areas and stations.                                                      | 6<br>1.594       | 13<br>1.667            | -.21        |
| 10<br>1.635       | 84   | Assist the handicapped student in viewing his/her assets and limitations realistically.                                 | 4<br>1.493       | 19.5<br>1.778          | -.87        |
| 11<br>1.640       | 80   | Assist students in developing the ability to manage time.                                                               | 9<br>1.615       | 13<br>1.667            | -.16        |
| 12<br>1.667       | 78   | Assist students in developing the ability to accept supervision.                                                        | 5<br>1.557       | 19.5<br>1.778          | -.70        |
| 13<br>1.671       | 61   | Involve the local community in activities for the handicapped.                                                          | 36.5<br>2.014    | 2<br>1.333             | 2.02*       |
| 14<br>1.680       | 64   | Work cooperatively with community groups and agencies.                                                                  | 38.5<br>2.029    | 2<br>1.333             | 2.44*       |
| 15<br>1.724       | 6    | Meet the needs of disadvantaged students with handicaps.                                                                | 14<br>1.671      | 19.5<br>1.778          | -.30        |
| 16<br>1.745       | 57   | Maintain a list of classroom safety rules.                                                                              | 17.5<br>1.714    | 19.5<br>1.778          | -.19        |
| 17<br>1.792       | 2    | Recommend a Vocational Education program for the handicapped student based on the needs of the community.               | 44<br>2.086      | 35.5<br>1.900          | 1.60        |
| 18<br>1.804       | 41   | Direct individualized instruction.                                                                                      | 8<br>1.609       | 35.5<br>2.086          | -1.20       |
| 19<br>1.811       | 83   | Assist students in developing a social, physical, and emotional security.                                               | 10.5<br>1.623    | 35.5<br>2.086          | -1.06       |
| 20<br>1.811       | 90   | Assist in identifying school Vocational Education purposes and goals for the handicapped student.                       | 31<br>1.956      | 58<br>1.667            | .91         |
| 21<br>1.823       | 10   | Provide a variety of activities and experiences.                                                                        | 21<br>1.757      | 23<br>1.900            | -.45        |
| 22<br>1.832       | 77   | Assist students in developing an awareness of economics in their daily lives.                                           | 21<br>1.757      | 28.5<br>1.889          | -.36        |
| 23<br>1.833       | 1    | Develop long-range plans for incorporating the handicapped student into the public school Vocational Education program. | 40<br>2.043      | 10<br>1.625            | 1.11        |

\* Significant at .05 level  
\*\* Significant at .01 level  
\*\*\* Significant at .001 level

Table 12 (continued)

| Rank<br>Avg. Mean | Item | Competency                                                                                                          | Rank/Mean         |                         | t-<br>Value |
|-------------------|------|---------------------------------------------------------------------------------------------------------------------|-------------------|-------------------------|-------------|
|                   |      |                                                                                                                     | Teachers<br>N= 72 | Administrators<br>N= 14 |             |
| 24<br>1.844       | 39   | Demonstrate a manipulative skill.                                                                                   | 24<br>1.800       | 26.5<br>1.889           | -.25        |
| 25<br>1.851       | 63   | Involve local and state agencies in identifying career opportunities for the handicapped student.                   | 25<br>1.828       | 26.5<br>1.889           | -.18        |
| 26<br>1.857       | 37   | Provide instruction for slower and more capable students.                                                           | 17.5<br>1.714     | 35.5<br>1.000           | -.83        |
| 27<br>1.862       | 68   | Report a student's progress to parents or guardians.                                                                | 19<br>1.473       | 35.5<br>1.000           | -.82        |
| 28<br>1.877       | 3    | Collect occupational data which considers the handicapped.                                                          | 53.5<br>1.200     | 8<br>1.558              | 1.81        |
| 29<br>1.898       | 36   | Employ reinforcement techniques.                                                                                    | 15<br>1.688       | 42.5<br>1.111           | -1.34       |
| 30<br>1.925       | 17   | Sequence training programs for the handicapped student.                                                             | 42.5<br>1.073     | 19.5<br>1.778           | .98         |
| 31<br>1.951       | 71   | Participate in workshops to compile and discuss ideas and student needs.                                            | 34.5<br>1.014     | 26.5<br>1.889           | .35         |
| 32<br>1.951       | 85   | Assist students in developing reading, arithmetic, spelling and writing skills.                                     | 36.5<br>1.014     | 26.5<br>1.889           | .34         |
| 33<br>1.964       | 59   | Assist students in career planning.                                                                                 | 29<br>1.929       | 35.5<br>1.000           | -.22        |
| 34<br>1.969       | 45   | Illustrate with models and real objects.                                                                            | 26<br>1.829       | 42.5<br>1.111           | -.70        |
| 35<br>1.982       | 82   | Assist student in becoming a productive member of the family.                                                       | 23<br>1.786       | 35.5<br>1.000           | -.59        |
| 36<br>1.984       | 20   | Provide performance-based learning experiences for handicapped students.                                            | 27.5<br>1.857     | 42.5<br>1.111           | -.65        |
| 37<br>1.984       | 69   | Use parent counseling and involvement.                                                                              | 27.5<br>1.857     | 42.5<br>1.111           | -.70        |
| 38<br>1.985       | 11   | Evaluate new materials and ideas designed for handicapped students.                                                 | 32<br>1.971       | 35.5<br>1.000           | -.11        |
| 39<br>1.989       | 19   | Develop units of instruction for teaching the handicapped.                                                          | 45<br>1.091       | 26.5<br>1.889           | .65         |
| 40<br>1.996       | 7    | Conduct a student Follow-up Study.                                                                                  | 38.5<br>1.214     | 19.5<br>1.778           | 1.25        |
| 41<br>2.000       | 12   | Evaluate program materials periodically.                                                                            | 33<br>1.000       | 35.5<br>1.000           | 0           |
| 42<br>2.021       | 4    | Investigate apprenticeship programs and requirements.                                                               | 50<br>1.159       | 26.5<br>1.889           | .68         |
| 43<br>2.169       | 5    | Evaluate overall goals, content, and human and material resources.                                                  | 47<br>1.116       | 46.5<br>1.222           | -.33        |
| 44<br>2.182       | 86   | Compare occupations in relation to job description, required training, qualifications and employment opportunities. | 48<br>1.147       | 46.5<br>1.222           | -.25        |
| 45<br>2.183       | 81   | Assist students in developing wholesome leisure activities.                                                         | 49<br>1.145       | 46.5<br>1.222           | -.19        |
| 46<br>2.196       | 9    | Provide learning materials which avoid abstractness.                                                                | 41<br>1.059       | 51.5<br>1.333           | -.65        |
| 47<br>2.203       | 33   | Direct students in applying problem-solving techniques.                                                             | 42.5<br>1.073     | 51.5<br>1.333           | -.68        |

Table 12 (continued)

| Rank<br>Avg. Mean | Item | Competency                                                                                 | Rank/Mean         |                         | t-<br>Value |
|-------------------|------|--------------------------------------------------------------------------------------------|-------------------|-------------------------|-------------|
|                   |      |                                                                                            | Teachers<br>N= 72 | Administrators<br>N= 14 |             |
| 48<br>2.738       | 56   | Maintain equipment.                                                                        | 16<br>1.700       | 70.5<br>2.778           | -3.19**     |
| 49<br>2.745       | 66   | Publicize the purpose of Vocational Education for the handicapped.                         | 63<br>2.494       | 35.5<br>2.000           | 1.19        |
| 50<br>2.748       | 89   | Become proficient in the use of sign language if there are deaf students in the classroom. | 30<br>1.941       | 51.5<br>2.556           | -1.38       |
| 51<br>2.762       | 54   | Design valid and reliable measurement instruments.                                         | 73<br>2.275       | 49<br>2.250             | .06         |
| 52<br>2.768       | 88   | Demonstrate objectivity and sensitivity.                                                   | 55<br>2.203       | 51.5<br>2.333           | -.29        |
| 53<br>2.770       | 13   | Use socially integrated learning activities for the handicapped.                           | 57<br>2.319       | 46.5<br>2.222           | .23         |
| 54<br>2.772       | 46   | Present information with overhead projector.                                               | 77<br>2.899       | 55<br>2.556             | .80         |
| 55<br>2.776       | 40   | Demonstrate a concept or principle.                                                        | 57<br>2.220       | 51.5<br>2.333           | -.26        |
| 56<br>2.784       | 32   | Direct student laboratory experience.                                                      | 43.5<br>2.014     | 58<br>2.556             | -1.51       |
| 57<br>2.784       | 22   | Select and obtain instructional materials prepared for handicapped students.               | 51.5<br>2.174     | 58<br>2.556             | -1.00       |
| 58<br>2.790       | 60   | Maintain current student records.                                                          | 46<br>2.114       | 65<br>2.667             | -1.54       |
| 59<br>2.827       | 23   | Plan optional learning activities for the handicapped.                                     | 52<br>2.188       | 65<br>2.667             | -1.17       |
| 60<br>2.877       | 34   | Direct the project method.                                                                 | 58<br>2.288       | 55<br>2.668             | -.93        |
| 61<br>2.844       | 35   | Employ oral questioning techniques.                                                        | 53.5<br>2.200     | 74<br>2.889             | -1.84       |
| 62<br>2.861       | 52   | Evaluate student performance according to instructional objectives.                        | 61<br>2.457       | 65<br>2.667             | -.48        |
| 63<br>2.892       | 16   | Provide bilingual instructional materials for students.                                    | 67<br>2.629       | 58<br>2.556             | .18         |
| 64<br>2.895       | 87   | Utilize behavior modification techniques and Adlerian methods.                             | 64<br>2.524       | 65<br>2.667             | -.29        |
| 65<br>2.812       | 21   | Write performance objectives for handicapped students.                                     | 72<br>2.725       | 6<br>2.500              | .44         |
| 66<br>2.813       | 48   | Present information with films.                                                            | 68<br>2.671       | 58<br>2.556             | .27         |
| 67<br>2.870       | 67   | Plan a "show day" or an open house.                                                        | 69.5<br>2.685     | 58<br>2.556             | .25         |
| 68<br>2.831       | 55   | Use budgeting, purchasing and inventory procedures.                                        | 62<br>2.485       | 70.5<br>2.778           | -.67        |
| 69<br>2.847       | 38   | Present information through an illustrated talk.                                           | 60<br>2.405       | 74<br>2.889             | -1.10       |
| 70<br>2.875       | 47   | Present information with filmstrips and slides.                                            | 69.5<br>2.686     | 65<br>2.667             | .04         |
| 71<br>2.741       | 29   | Direct students in instructing other students.                                             | 66<br>2.594       | 65<br>2.889             | -.66        |

Table 12 (continued)

| Rank<br>Avg. Mean | Item | Competency                                                            | Rank/Mean         |                         | t-<br>Value |
|-------------------|------|-----------------------------------------------------------------------|-------------------|-------------------------|-------------|
|                   |      |                                                                       | Teachers<br>N= 14 | Administrators<br>N= 72 |             |
| 72<br>2.799       | 18   | Write lesson plans for teaching the handicapped.                      | 71<br>2.701       | 74<br>2.889             | -.38        |
| 73<br>2.830       | 50   | Direct programmed instruction.                                        | 76<br>2.882       | 70.5<br>2.778           | .23         |
| 74<br>2.846       | 49   | Present information with televised materials.                         | 81<br>3.014       | 65<br>2.667             | .75         |
| 75<br>2.878       | 14   | Construct a daily assignment sheet for class activities.              | 78<br>2.929       | 70.5<br>2.778           | .35         |
| 76<br>2.937       | 24   | Organize informational topics for the handicapped into similar units. | 74<br>2.785       | 77.5<br>3.111           | -.91        |
| 77<br>2.941       | 26   | Direct individual and group field trips.                              | 75<br>2.771       | 77.5<br>3.111           | -.72        |
| 78<br>2.949       | 30   | Employ the techniques of role-playing and simulation.                 | 65<br>2.565       | 84.5<br>3.333           | -2.07*      |
| 79<br>2.992       | 27   | Conduct group discussions.                                            | 77<br>2.768       | 81.5<br>3.222           | -1.14       |
| 80<br>2.985       | 15   | Group students according to ability.                                  | 84<br>3.060       | 77.5<br>3.111           | -.10        |
| 81<br>3.126       | 51   | Present information with the chalkboard.                              | 82<br>3.029       | 81.5<br>3.222           | -.42        |
| 82<br>3.133       | 70   | Organize student vocational organizations.                            | 83<br>3.044       | 81.5<br>3.222           | -.37        |
| 83<br>3.135       | 44   | Illustrate with bulletin boards.                                      | 85<br>3.159       | 77.5<br>3.111           | .10         |
| 84<br>3.200       | 43   | Present information using a subject matter expert.                    | 79<br>2.957       | 86.5<br>3.444           | -1.06       |
| 85<br>3.205       | 53   | Utilize standardized as well as teacher-made tests.                   | 86<br>3.198       | 81.5<br>3.222           | -.07        |
| 86<br>3.214       | 42   | Conduct team teaching.                                                | 80<br>2.985       | 86.5<br>3.444           | -1.06       |
| 87<br>3.226       | 31   | Direct student study of texts and references.                         | 88<br>3.319       | 84.5<br>3.333           | -.04        |
| 88<br>3.689       | 28   | Stimulate learning through brainstorming and buzz group techniques.   | 87<br>3.269       | 89<br>4.111             | -1.74       |
| 89<br>3.904       | 25   | Organize committees and panels to work on group topics.               | 89<br>3.721       | 88<br>3.889             | -.41        |
| 90<br>4.253       | 65   | Prepare a monthly/quarterly newsletter.                               | 90<br>4.174       | 90<br>4.333             | -.36        |

\* Significant at .05 level

\*\* Significant at .01 level

\*\*\* Significant at .001 level

Table 13

Important Competencies to Both Administrators and Teachers

| Item | Competency Statements                                                                              |
|------|----------------------------------------------------------------------------------------------------|
| 6    | Meet the needs of disadvantaged students with handicaps                                            |
| 10   | Provide a variety of activities and experiences                                                    |
| 57   | Maintain a list of classroom safety rules                                                          |
| 58   | Supervise the safe arrangement of student work areas and stations                                  |
| 62   | Establish communication with potential employers of the handicapped                                |
| 72   | Keep abreast of new trends and techniques in teaching the handicapped                              |
| 73   | Work with teachers in related fields in planning correlated and joint requirements and experiences |
| 74   | Develop on-the-job training programs                                                               |
| 75   | Motivate students                                                                                  |
| 76   | Relate instruction to the world of work                                                            |
| 79   | Assist students in developing a sense of responsibility                                            |
| 83   | Assist students in developing a social, physical, and emotional security                           |
| 84   | Assist the handicapped student in viewing his/her assets and limitations realistically             |

Open-Ended Responses

In addition to the competency statements on the instrument several blank spaces in which respondents added competencies they felt were important. Appendix F lists these open-ended responses added by administrators and supervisors of vocational education programs in Florida.

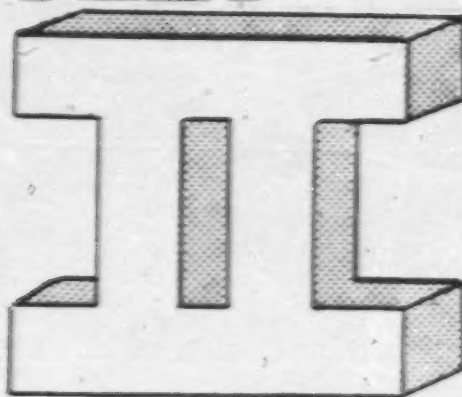
## CHAPTER 5

### CONCLUSIONS

Based on the analysis of data from returned instruments, several conclusions may be drawn. It appears as if there are a large number of professional competencies that are important to administrators and teachers of vocational education programs for the handicapped in Florida. Of the 90 competency statements included on the survey instrument, only three had an average importance rating higher than the midpoint (3.500) on the 6 point rating scale. It could be concluded that an administrator or teacher of vocational programs for the handicapped in Florida is called upon to execute many tasks in the performance of his or her professional responsibilities. It appears as if the preliminary competencies were screened very well by the jury and that most unimportant items were deleted before the survey instrument was prepared in final form.

A second conclusion that may be drawn is that competencies important to administrators and teachers of vocational programs for the handicapped in Florida do not vary greatly according to the type of administrative or teaching position held. Of the 90 competencies, only four were rated significantly different between the two sub-groups of administrators and teachers. It appears as if most of the professional competencies on the instrument are generic competencies for all vocational teachers and administrators of vocational programs for the handicapped.

**PART**



**HANDICAPPED COMPONENT-  
Criteria Identification**

## CHAPTER 6

### METHODOLOGY FOR IDENTIFYING CRITERIA

#### Need

In order to fully implement a competency-based program, a means of assessing competency mastery should be developed. Among the elements of a CBTE program identified by Elam (1971) is the use of assessment criteria which (1) are based upon specified competencies, (2) state expected levels of mastery under specified conditions, and (3) are made public in advance. Assessment criteria may allow objective assessment of competency mastery based primarily on the performance of the trainee.

Dodl and Schalock (1973) stated that the criteria for "... assessing what a prospective teacher can do (performance) should be as rigorous, as systematically derived, and as explicitly stated as the criteria for assessing either what he knows (knowledge) or what he can achieve in learners." The authors added that traditional teacher education programs have relied heavily on knowledge criteria but that performance criteria will constitute a major force for innovation in education during the next decade.

#### Purpose

The purpose of this phase of the project was to develop objective, specific assessment criteria for those competencies that were rated as important by Florida's administrators, supervisors and teachers. These criteria may then be used by evaluators to objectively assess whether individuals have mastered these competencies. Such criteria might be useful for preservice assessment of certain competencies in a university-based program or for inservice assessment for staff development, needs assessment, promotion and similar uses.

The project staff developed several parameters for assessment criteria that would be developed. These parameters, it was felt, would help to operationalize the competency-based program by taking much of the subjectivity out of assessment. These parameters for assessment criteria should:

1. Include all key elements of the competency
2. Be based entirely on the competency itself

3. Be stated in past tense
4. Require only a "yes" or "no" response
5. Be as objective as possible.

#### Validation by Jury

Competencies receiving an average importance rating for both groups of teachers and administrators or supervisors of 3.500 (midpoint) or less on the 6 point rating scale were considered important by the project staff for teachers of vocational education programs in the regular school setting for the handicapped student in Florida. The next step in the project was to develop assessment criteria for evaluating mastery of these competencies.

The project staff developed preliminary assessment criteria for the 87 competencies which were considered to be important. Criteria statements were developed using the parameters discussed earlier. A jury of five educators in areas directly related to vocational education preparation of handicapped students was used to review these criteria statements and make revisions, additions, and deletions. A letter (see Appendix G) was hand carried to potential jury members asking them to serve. Individuals agreeing to review the preliminary criteria statements were sent a follow-up letter to verify their services (see Appendix H) and a packet of materials explaining the desired criteria statements in more detail (see Appendix I). The following individuals served as jury members to review the preliminary assessment criteria for the handicapped component:

1. Foster Rossier, Director of Special Education for Leon County, Tallahassee, Florida
2. Nancy G. Yohner, Hearing Impaired Student, Lively Voc-Tech Center, Tallahassee, Florida
3. Paula Warboasky, (formerly) Hearing Impaired Student, Lively Voc-Tech Center, Tallahassee, Florida

4. Joel G. Corley, Consultant, Exceptional Students, State Department of Education, Tallahassee, Florida
5. Eleanor W. Bates, Consultant, Exceptional Students, State Department of Education, Tallahassee, Florida.

## CHAPTER 7

### FINDINGS - CRITERIA

Based on the comments made by jury members, the preliminary assessment criteria were revised. Jury members were encouraged to make additions, deletions or alter criteria statements based on their suitability for objective evaluation of competencies. Table 14 lists the revised criteria statements for the 90 competency statements that received a mean importance rating of 3.500 (midpoint) or less on the 6 point rating scale.

The competency statements in Table 14 have been grouped by the project staff into the following categories:

1. Program planning, development and evaluation
2. Instructional planning
3. Teaching methods-media
4. Student evaluation
5. Management
6. Guidance
7. School-community relations
8. Student organizations
9. Instructor's professional role and development
10. Unique competencies.

This categorization is tentative only and is based solely upon the judgment of the project staff. Grouping of competencies for use in a preservice or inservice program can be accomplished based on the unique needs of participants and the objectives of the particular program.

Table 14

## Assessment Criteria for Competencies

## Category A: Program Planning, Development and Evaluation

1. Develop long range plans for incorporating the handicapped student into the public school Vocational Education Program.
  - a. A survey of community was conducted to determine projected enrollment of handicapped students.
  - b. Staff development was encouraged.
  - c. Programs for handicapped were evaluated.
  - d. Students were placed on advisory committee.
  - e. Counseling services for handicapped were provided.
2. Recommend a Vocational Education Program for the handicapped student based on the needs of the community.
  - a. Conducted staff meeting to determine the immediate and future needs of the community.
  - b. Involved community organizations such as local churches, Greek letter organizations, Urban League, etc.
  - c. Involved community trade and labor organizations with the needs of the community.
  - d. Collected and analysed community needs in survey data.
  - e. Collected and analysed data indicating community acceptance of the handicapped as an employee.
3. Collect occupational data which considers the handicapped.
  - a. Contacted local community employment agencies to keep abreast of their occupational data.
  - b. Involved and informed the occupational specialist or vocational guidance counselor at your school in current data for the handicapped.
  - c. Contacted the Federal employment agencies for possible occupational data which involved handicapped persons.
  - d. Gathered published data (periodicals) which involved current occupational data for the handicapped.
4. Investigate apprenticeship programs and requirements.
  - a. Listed current standards for numerous apprenticeship programs.
  - b. Identified state apprenticeship regulations.
  - c. Reviewed standards of apprenticeship programs on a national scope.
  - d. Developed a method of feedback of community feeling about apprenticeship programs which involved the handicapped.
  - e. Surveyed technical and vocational schools follow-up programs for apprenticeship programs.
  - f. Identified Federal programs offering assistance in establishing apprenticeship programs.
5. Evaluate overall goals, content, and human and material resources.
  - a. Goals and content were based on employment needs of community.
  - b. Goals and content were based on potential enrollment of handicapped students.
  - c. Advisory committee recommendations were considered in planning overall vocational education program for the handicapped.
  - d. Advisory committee was involved in goal and content formulation.
  - e. Program effectiveness was evaluated.
  - f. Special facilities, equipment, tools, etc. for handicapped were provided.
6. Meet the needs of disadvantaged students with handicaps.
  - a. Identified the disadvantaged students with handicaps as individuals.
  - b. Recruited disadvantaged students with handicaps into vocational programs.
  - c. Identified and obtained external funding for programs designed for disadvantaged students with handicaps.
  - d. Developed inservice programs to prepare teachers to teach disadvantaged students more effectively.
  - e. Evaluated programs designed to meet the needs of disadvantaged students with handicaps.
7. Conduct a student Follow-up Study.
  - a. Systematic plan for conducting follow-up study was developed.
  - b. Former students were identified.
  - c. Used follow-up data to make appropriate changes in learning activities.
  - d. Student evaluations were used to identify problem areas and to modify procedures accordingly.

Table 14 (continued)

Category B: Instructional Planning

8. Identify needs, interests of the handicapped student.
  - a. Those goals which the vocational education program can meet were identified.
  - b. Need for a performance-based approach was identified.
  - c. Learning activities were developed that focus on helping students master specified competencies.
  - d. Goals and objectives of vocational education program for the handicapped were established.
  - e. Specific interests of the handicapped student were developed from goals.
9. Provide learning materials that avoid abstractness.
  - a. Developed concrete learning experiences.
  - b. Made models of unavailable learning equipment.
  - c. Scheduled "hands-on" activities.
  - d. Utilized "commercial kits" and "games" where possible.
  - e. Utilized "teacher-made" learning packets.
  - f. Provided concrete examples of all learning experiences where necessary.
10. Provide a variety of activities and experiences.
  - a. Utilized educational television programs.
  - b. Developed computer assisted instructional programs.
  - c. Developed microfiche lessons.
  - d. Critiqued career education games for class use.
  - e. Used various audio-visual materials.
  - f. Provided "Learning Resource or Media Center" activities.
  - g. Utilized job sample or work simulation experiences.
  - h. A variety of learning strategies and activities were utilized.
11. Evaluate new materials and ideas designed for handicapped students.
  - a. Utilized professional associates, specialists, etc., in developing and evaluating a new curriculum.
  - b. Used curriculum evaluation data in developing new curriculum materials.
  - c. Utilized the students' personal ideas and interests.
  - d. Organized an advisory board made up of vocational educators, special educators, media specialists, curriculum specialists, administrative personnel, lay members from business and professional community, and parents.
12. Evaluate program materials periodically.
  - a. Evaluation criteria were developed.
  - b. The program evaluation was carried out.
  - c. Media center was asked to include vocational education program for the handicapped on their mailing list.
  - d. Maintained good correspondence with local, state, and national agencies that aided the handicapped.
13. Use socially integrated learning activities for the handicapped.
  - a. Involved handicapped students in all classroom activities, whenever possible.
  - b. Encouraged students to take part in the student aide program.
  - c. Developed sociogram.
  - d. Employed "least restrictive environment" criteria as a measure for integration.
  - e. Used mainstreaming techniques for integration of handicapped students in regular classroom activities.
14. Construct a daily assignment sheet for class activities.
  - a. Student used the rotating method for different daily assignments.
  - b. All students participated in "clean-up" activities daily.
  - c. Students were encouraged to volunteer for unassigned activities.
15. Group students according to ability.
  - a. Grouped handicapped students according to interests and abilities when possible.
  - b. Individualized instructional materials were developed.
  - c. Administered vocational inventory test.
  - d. Utilized the student's cumulative records.
  - e. Utilized work evaluation assessment in determining students' strengths and weaknesses.
16. Provide bilingual instructional materials for students with language barriers.
  - a. The aid of a bilingual instructor was acquired.
  - b. Instructional aids were developed to assist bilingual students with handicaps.

Table 14 (continued)

---

Category B: Instructional Planning (continued)

---

- c. Adapted audio-visual aids to class situation.
  - d. Translated vocational and technical materials from various sources.
  - e. Investigated commercial catalogues to find instructional materials already on the market.
17. Sequence training programs for the handicapped student.
- a. Modules were developed.
  - b. A progress chart was prepared.
  - c. Developed an incentive award system.
  - d. Developed step-by-step wall charts.
18. Write lesson plans for teaching the handicapped.
- a. Developed a daily lesson plan.
  - b. Developed long-range lesson plans.
  - c. Utilized flexible lesson plans.
  - d. Incorporated the appropriate audio-visual materials with lesson plans.
  - e. Utilized guidelines from P.L. 94-142 in assisting in developing and following Individual Educational Plans.
19. Develop units of instruction for teaching the handicapped.
- a. Developed and utilized units of instruction.
  - b. Involved special education instructor in the development of units of instruction.
  - c. Planned field trip experiences.
  - d. Involved teaching methods and materials of as many different kinds as possible and employed multi-sensory experiences.
  - e. Correlated other subject areas.
20. Provide performance-based learning experiences for handicapped students.
- a. Developed modules.
  - b. A system of evaluation was devised.
  - c. Geared teaching modules to the world of work which incorporated handicapped persons.
  - d. Teaching modules incorporated academic activities of the special education classes with activities of the vocational education classes.
21. Write performance objectives for handicapped students.
- a. Developed "learning packets" for topics.
  - b. Based objectives on overall goal for each grading period.
  - c. "Built-in" flexibility.
  - d. Allowed students to progress at an individual pace.
  - e. Objectives were individualized.
22. Select and obtain instructional materials prepared for handicapped students.
- a. Secured instructional materials.
  - b. Evaluated instructional materials.
  - c. Materials were geared to the individual needs of the student.
  - d. Incorporated commercially developed instructional materials.
23. Plan optional learning activities for the handicapped.
- a. Utilized students' input.
  - b. Acquired input from non-vocational staff.
  - c. Utilized suggestions from parents and other interested persons.
  - d. Developed an evaluative procedure for optional learning activities.
24. Organize informational topics for the handicapped into similar units.
- a. Utilized students' input.
  - b. Utilized recommendations from business and industry.
  - c. Incorporated career opportunity topics.
  - d. Organized informational system.

---

Category C: Teaching Methods - Media

---

25. Direct individual and group field trips.
- a. Planning for the field trip included specification of learning outcomes, cooperation with agency to be visited, and identification or arrangement for specific activities and schedule.
  - b. In addition to participation in the field trip, handicapped student activities involved input during development of learning outcomes, and orientation session for the field trip, evaluation of the field trip, summarization of the key concepts of the field trip, and formulation of "thank you note" to agency (if appropriate).

Table 14 (continued)

Category C: Teaching Methods-Media

- c. During the field trip, the teacher provided guidance and supervision for the handicapped students, provided or arranged for competent explanation and/or clarification, and directed planned activities enabling adherence to schedule.
27. Conduct group discussions.
    - a. Guideline questions were directed to a group, not individuals, and were decided upon by the group of handicapped students.
    - b. Questions not related to the topic were avoided.
    - c. Everyone had an opportunity to speak.
    - d. Discussion was maintained by interjecting questions.
    - e. The topic was introduced in such a way to provide simulation.
    - f. A summary of points was made.
  29. Direct students in instructing other students.
    - a. The desirability of utilizing this technique was determined for each and a rationale given for the selection.
    - b. Handicapped students were selected to provide instruction based on advancement beyond the group, and student capability in the specific area.
    - c. Handicapped students were selected to receive instruction based on requirement for help with assignments, and student capability in the specific area.
    - d. The instruction was based on definite plans developed by the teacher.
  30. Employ the techniques of role-playing and simulation.

Role-Playing

- a. Role-playing was based on performance objectives.
- b. Planning for the situation included evaluation of the material for elements potentially harmful or embarrassing to participants, revisions required to assure that material would not be harmful or embarrassing to participants, and identification and provision of props capable of facilitating the situation.
- c. Orientation included introduction to the situation and/or technique, and presentation of the situation by the teacher or student volunteers.
- d. Teacher monitoring of the role-playing situation consisted of maintaining lack of harmful or embarrassing material, balancing participation through revising roles and/or interjecting information, and terminating the experience when objectives were met or when the situation ceased to be constructive.
- e. Follow-up included summary of the main ideas, and evaluation of the experience.
- f. Props were promptly returned.

Simulation

- a. Simulation was based on performance objectives.
- b. Planning for the simulation experience included identifying resources, obtaining resources, and identification or determination of specific details.
- c. Handicapped student orientation consisted of explanation of simulation as a technique and introduction to the specific experience.
- d. The teacher provided assistance in carrying out the simulation.
- e. A follow-up session included summary of the major concepts and evaluation of the experience.
- f. Non-expended resources were returned or stored.

31. Direct student study of texts and references.
  - a. Assignments were based on specific performance objectives and student's needs and abilities.
  - b. Students were involved in formulating the assignment.
  - c. Directions to handicapped students included purpose of assignment, performance objectives, instructions for completion, provision for student questions, criteria for evaluating the assignment, and availability of any special facilities and/or equipment.
  - d. Information and assignment sheets were used to supplement oral instruction by the teacher.
  - e. Frequent checks were made to determine student use of information and assignment sheets for assistance.
  - f. Use of supervised group study included instruction in effective study techniques, explicit objectives and questions for study formulated cooperatively with students, and provision of an environment conducive to study.
  - g. Teacher assistance to handicapped students relating to study of reading material included selection of resource materials suited to the ability of the student, guidance in selecting pertinent information from the materials, guidance in adapting reading techniques to fit the material, and aid in evaluation of the material and accurate recording of both the important information and the resources used.
  - h. Continuous evaluation enabled each student to assess his/her progress.
32. Direct student laboratory experience.
  - a. The experience was based on handicapped student needs.

## Category C: Teaching Methods-Media

- b. Provision was made for discussion of the experience.
  - c. Student progress was monitored.
  - d. The handicapped student's skills were assessed.
  - e. Teacher assistance in handicapped student preparation of laboratory work or job plans included aid in using resource materials in the preparation, variation in kind and amount of planning to suit individual needs, aid in listing equipment and supplies required for the job, aid in listing operations in proper sequence, and planning a schedule for job completion.
  - f. Teacher guidance of handicapped student progress in using operation and/or job sheets included a check of the sheets for clear and explicit directions, use of the sheets to monitor student progress, and evaluation of student utilization of the sheets.
33. Direct students in applying problem-solving techniques.
- a. Teacher involvement with the handicapped student included guidance in identifying the problem, aid in defining and delimiting the problem, help in gathering evidence to solve the problem, and aid in formulating and testing possible solutions for the problem.
  - b. Selection of the problem was based on the student (e.g. his/her level of advancement/achievement).
34. Direct the project method.
- a. The core project methods were used.
  - b. Assembly line project methods were used.
  - c. Projects were selected for educational enrichment.
  - d. Projects selected were of current trends of modern businesses and industry.
35. Employ oral questioning techniques.
- a. Questions emphasized topic's main points.
  - b. The questions were directed to total group before calling on a single individual.
  - c. Questions requiring only "yes" or "no" were used sparingly.
  - d. Questions were sequenced in a logical order.
  - e. Answers which opened new questions were followed through.
36. Employ reinforcement techniques.
- a. Studied the specific student performance objectives to determine the reinforcement techniques used.
  - b. Students' individual needs were considered in the selection of techniques of reinforcement.
  - c. Utilized such techniques as audio and videotape recording feedback, summaries and reviews, programmed materials, individual and group assignments, emphasis by repetition (e.g. drills), and recognition of positive behavior to reinforce learning.
37. Provide instruction for slower and more capable students.
- a. Used resource material on the planning of instruction for individual differences.
  - b. Used assessment of individual needs and abilities.
  - c. Formulated plans for group and individualized instruction based on assessed handicapped student needs and abilities.
  - d. Selected instructional experiences feasible with available resources.
38. Present information through an illustrated talk.
- a. Gestures were used to clarify and emphasize ideas.
  - b. The teacher's facial expressions were suited to the impression he wanted to make on the handicapped students.
  - c. Pauses were used to emphasize points.
  - d. The visual aid selection was used effectively to aid in the presentation.
  - e. The visuals were appropriate for the lesson where student's handicap was not visual.
  - f. The visuals were visible for all students.
  - g. The teacher addressed the students, not the visuals, while talking.
39. Demonstrate a manipulative skill.
- a. Equipment and tools were ready for use before class.
  - b. The demonstration was directed to handicapped students and their cues were utilized to make the demonstration effective.
  - c. The steps of the demonstration were done separately, explained, and performed in proper sequence.
  - d. The demonstration was easily seen by the students.
  - e. The method commonly used in the field was shown.
  - f. Safety points were outlined.

Table 14 (continued)

## Category C: Teaching Methods-Media

- g. The demonstration was performed in actual/simulated conditions.
  - h. The steps were summarized.
  - i. Feedback was solicited from the students.
40. Demonstrate a concept or principle.
- a. Demonstrated the proper use of equipment, tools, and materials.
  - b. Set up demonstration so it could be easily viewed by each student.
  - c. Demonstrated and explained the new concept or principle in relation to previous instruction.
  - d. Related each step of the demonstration to the concept or principle being presented.
  - e. Instructional media and aids were planned to illustrate steps that could not be demonstrated clearly.
  - f. Reviewed the steps at the conclusion of the demonstration.
  - g. Solicited feedback from the students to evaluate their understanding of the concept or principle presented.
  - h. Requested the students to analyze a new situation in relation to the concept or principle.
41. Direct individualized instruction.
- a. Instruction for each handicapped student included suggested resources and instructional materials, guidance in use of resources and materials, review of assignments, opportunity to ask questions, guidance in determining key points of information, and continuous evaluation.
  - b. Instruction was based on individual handicapped student needs.
  - c. Handicapped students were able to assess their own progress.
42. Conduct team teaching.
- a. Planning involved input and cooperation from all members of the teaching team.
  - b. Three degrees of individualization were used: large group, small group, and individualized.
  - c. Large group instruction was used for introduction and generalities in the learning process.
  - d. Small group (seminar-type classes) instruction was used for more specific instruction.
  - e. Independent study was used for in-depth coverage of subject matter of special interest to the student.
  - f. Participation from each team member represented a fair distribution of required time and an appropriate use of talents.
43. Present information using a subject matter expert.
- Before Presentation
- a. The resource person was selected to present special information and to answer questions related to his/her area of specialization.
  - b. The resource person was provided orientation for the presentation including purpose of lesson, special needs or interests of handicapped students in the class, his/her role in the lesson, and time allotments.
- Presentation
- a. (Preview) The resource person was introduced including an explanation of the specific purpose of the presentation.
  - b. The presentation was directly related to the performance objectives.
  - c. (Follow-up) Following the presentation, the teacher guided the students in review and evaluation of the information in the presentation.
- After Presentation
- Appreciation and recognition were expressed to the resource person (e.g. letter).
44. Illustrate with bulletin boards.
- a. The display was directly related to performance objectives.
  - b. The display consisted of educational materials and/or information.
  - c. The exhibit or bulletin board was selected to satisfy a specific purpose(s). Appropriate purposes include activation, clarification of information, stimulation of thought, presentation of concept, initiation of discussion, and reinforcement of learning.
  - d. Handicapped students were involved in the planning and development of the exhibit or bulletin board.
  - e. Upon completion of usage, the exhibit or bulletin board was dismantled carefully and promptly and materials were returned, stored, and/or disposed of properly.
45. Illustrate with models and real objects.
- a. The model was clear and could be viewed by all students.
  - b. The model simplified and emphasized the information.

Table 14 (continued)

Category C: Teaching Methods-Media

- c. The teacher continued student eye contact while manipulating the model.
  - d. The model was concealed from view until time for its use.
  - e. The purpose for using the model was made clear to the students.
  - f. The model didn't distract from the information.
  - g. After class, the students had the opportunity to examine the model closely.
46. Present information with overhead projector.
- a. The projector was ready for use before class began.
  - b. The projector was used to clarify information.
  - c. The handicapped students could all see the illustrations.
  - d. The guidelines for using the projector were followed.
  - e. Materials selected were appropriate to handicapped student comprehension level and to the instructional objectives.
  - f. A variety of techniques were used.
  - g. Only the parts of the illustrations being used were shown. Irrelevant ones were concealed.
47. Present information with filmstrips and slides.
- Before Presentation
- a. Preview and evaluation of the slides or filmstrips confirmed that a specific performance objective is addressed by the slides or filmstrip.
  - b. Appropriate procedures were used to secure (e.g. school guidelines are followed), set up (e.g. physical arrangement optimizes seeing and/or hearing for handicapped students), and check material and equipment (e.g. focus is operable).
- Presentation
- a. (Preview) The purpose(s) of presentation were explicit, relevant to learning, suited to the medium, and presented to students in appropriate detail.
  - b. The presentation was adequately integrated into the total lesson.
  - c. (Follow-up) Summary and evaluation of the experience was conducted after the presentation, e.g. guided discussion.
- After Presentation  
Appropriate procedures were used to return slides or filmstrip and equipment (e.g. prompt return).
48. Present information with films.
- Before Presentation
- a. Preview and evaluation of the film confirmed that a performance objective(s) is addressed by the film.
  - b. The film was judged to be suitable in length for the lesson, class period, and type of handicapped students.
  - c. Appropriate procedures were used to secure (e.g. school guidelines are followed), set up (e.g. screen is arranged so that all students can see), and check the film and equipment (e.g. focus and volume are operable).
- Presentation
- a. (Preview) The purpose(s) of presentation were explicit, relevant to learning, suited to the medium, and presented to students in appropriate detail.
  - b. Efficient operation of equipment (e.g. volume and focus) enhanced the learning situation. This condition was obtained through qualified operation (for group) or adequate demonstration of operation and availability for giving assistance and answering questions (for individual).
  - c. (Follow-up) Summary and evaluation of the experience was conducted after the film presentation, e.g. group discussion.
- After Presentation  
Appropriate procedures were used to return film and equipment (e.g. prompt return).
49. Present information with televised materials.
- a. Televised programs were incorporated into the daily lesson plans, where applicable.
  - b. Handicapped students participated in the production of several televised programs for the vocational education classes.
  - c. Television viewing was monitored for educational purposes during class time.
50. Direct programmed instruction.
- a. Evaluation methods which accommodate individual student differences were used.
  - b. Learning experiences were selected based on student needs.
  - c. The process for programmed instructional material included identification of sources, collection of samples, analysis in relation to instructional goals, and selection of specific materials.
51. Present information with the chalkboard.
- a. The chalkboard material aided in achieving the student performance objective.

Table 14 (continued)

## Category C: Teaching Methods-Media

- b. Detailed information was put on the board before class and concealed until time for its use.
- c. All illustrations were clear, orderly, and readable.
- d. The visuals could be seen by all handicapped students.
- e. The teacher addressed the students, not the board.
- f. The teacher used the board to summarize main points.

## Category D: Student Evaluation

- 52. Evaluate student performance according to instructional objectives.
  - a. Observation of individual demonstration was used.
  - b. Objective tests were used.
  - c. Standardized tests were used.
- 53. Utilize standardized as well as teacher-made tests.
  - a. Standardized as well as teacher-made tests were used as pre and post screening devices.
  - b. Tests were used to evaluate students' progress in the class.
  - c. Tests were evaluated for validity and reliability.
  - d. Communication with the parents or guardians of handicapped students was established to inform them of the achievements of test scores.
- 54. Design valid and reliable measurement instruments.
  - a. Current valid instruments were used.
  - b. Current reliable instruments were used.
  - c. Scientific methodology of evaluation was applied.

## Category E: Management

- 55. Use budgeting, purchasing and inventory procedures.
  - a. Official guidelines were used for inventory procedures.
  - b. All budgeting, purchasing and inventory was sanctioned by the administration.
  - c. Productive follow-up procedures were utilized.
- 56. Maintain equipment.
  - a. Equipment was personally checked daily.
  - b. Repairs were made by competent personnel.
  - c. Equipment was replaced when necessary.
  - d. Equipment used met modern industrial standards.
- 57. Maintain a list of classroom safety rules.
  - a. Daily charts were devised for safety checks in equipment.
  - b. A chart of all safety rules was posted in a highly visible area.
  - c. Safety rules and procedure, for each machine were posted on or near the equipment.
  - d. Periodic evaluation was made of students' knowledge of safety rules.
  - e. First aid equipment was made available.
  - f. Local, fire, police telephone numbers were visibly posted.
  - g. Safety rules were disseminated to parents.
- 58. Supervise the safe arrangement of student work areas and stations.
  - a. Daily check of students' work stations was made.
  - b. Classroom monitors were appointed or elected to maintain clean and safe work areas.
  - c. Students participated in class and lab maintenance.
  - d. Students were encouraged to keep safe and clean work stations through the use of a merit system.

## Category F: Guidance

- 59. Assist students in career planning.
  - a. A variety of related career opportunities were presented to the students.
  - b. Career education was incorporated into daily lesson plans.

Table 14 (continued)

## Category F: Guidance (continued)

- c. Field trips were planned to visit occupational sites.
  - d. Persons from various related occupations were invited to class sessions.
  - e. Worked with the local occupational specialist and/or career education director.
  - f. Worked with school guidance counselor.
60. Maintain current student records.
- a. Individual conferences were held with students for current class standing.
  - b. Students and parents or guardians were advised of evaluation techniques.
  - c. Guardian or parent conferences were called periodically.
  - d. Individual students and class record books were kept current.
  - e. Student records were reviewed in terms of state and federal regulations governing education of the handicapped in conforming with current requirements.

## Category G: School-Community Relations

61. Involve the local community in activities for the handicapped.
- a. Organized an advisory committee composed of interested members of the community.
  - b. Invited local business and industry representatives to class for discussions and demonstrations.
  - c. Entered students' projects in local and district exhibitions fairs.
  - d. Attended appropriate community meetings to inform them about the program.
  - e. Maintained communications with local church organizations.
62. Establish communications with potential employers of the handicapped.
- a. Contacted local charitable organizations such as Lion's Club, Kiwanis Clubs, etc. for possible employment contacts.
  - b. Contacted local and state employment agencies.
  - c. Contacted local business and industry for employment of the handicapped.
63. Involve local and state agencies in identifying career opportunities for the handicapped student.
- a. Communicated with local and state career education coordinators for career opportunity feedback.
  - b. Invited local directors of placement services for lecture discussion sessions with students.
  - c. Worked with occupational specialists in determining employability skills.
  - d. Worked with Manpower agencies.
64. Work cooperatively with community groups and agencies.
- a. Contacted local charitable organizations such as Lion's Clubs, Kiwanis Clubs, etc. for possible employment contact.
  - b. Contacted local and state employment agencies.
  - c. Contacted local business and industry for employment of the handicapped.
  - d. Utilized media for public service announcements.
  - e. Worked with Manpower agencies concerning possible employment for students.
66. Publicize the purpose of Vocational Education for the handicapped.
- a. Utilized local T.V. and radio stations to publicize vocational education for the handicapped.
  - b. Utilized local newspaper for pictorial display of students' work.
  - c. Wrote short news article about program for school newspaper.
  - d. Spoke at several local meetings to explain the program of vocational education for the handicapped.
  - e. Invited city and district officials to visit the vocational education classes.
67. Plan a "show day" or an open house.
- a. Displayed students' work in local, district, and state exhibition fairs.
  - b. Organized student's exhibition in the school.
  - c. Interchanged students' work in the display case.
  - d. Invited other interested persons to visit class during activity sessions.
68. Report a student's progress to parents or guardians.
- a. Maintained frequent communications with parents or guardians.
  - b. Involved parents and guardians in student's future educational plans through group and individual conferences.
  - c. Explained students progress charts to parents and guardians.
  - d. Invited parents/guardians to workshop designed to familiarize them with the child's course of study.
  - e. Encouraged parents/guardians to visit class during regular school hours.

Table 14 (continued)

---

Category G: School-Community Relations (continued)

---

69. Use parent counseling and involvement.

- a. Parents were invited to a workshop designed to familiarize them with their children's course of study.
  - b. Individual parent conferences were organized.
  - c. Parents were encouraged to visit class during regular school hours.
  - d. Parents were encouraged to give instructor periodic advice.
  - e. Parents were involved in educational planning and staffing.
- 

Category H: Student Organizations

---

70. Organize student vocational organizations.

- a. Maintained membership in student organizations such as VICA.
  - b. Involved handicapped students in SGA.
  - c. Involved students in activities to help maintain their organization.
  - d. Investigated organizations that were geared to help specific handicaps such as NAD (National Association for the Deaf).
- 

Category I: Instructor's Professional Role and Development

---

71. Participate in workshops to compile and discuss ideas and student needs.

- a. Professional workshops were attended.
- b. Industrial and business workshops were attended.
- c. Participated in a variety of professional development activities.
- d. Exceptional student educational workshops were attended.

72. Keep abreast of new trends and techniques in teaching the handicapped.

- a. Maintained membership in professional vocational organizations.
- b. Maintained correspondence with agencies and organizations for the handicapped.
- c. Instructional aids for the handicapped were kept up-to-date.
- d. Maintained membership in professional organizations for educators of exceptional students.

73. Work with teachers in related fields in planning correlated and joint learning requirements and experiences.

- a. Worked cooperatively with special area staff.
  - b. Teachers of academic areas were advised of current vocational activities.
  - c. Resource center personnel were notified of current vocational instructional materials.
  - d. Team approach to program development was utilized.
- 

Category J: Unique Competencies

---

74. Develop on-the-job training programs.

- a. Notified local employers of job skills of the handicapped students.
- b. Utilized part-time work experience.
- c. Rotated the students in on-the-job training programs.
- d. Employed techniques of cooperative education.

75. Motivate students.

- a. A rewards system was used in teaching students.
- b. Student-centered activities were used.
- c. Students' major interests were identified.
- d. Learning experiences were related to involved students' personal experiences.

76. Relate instruction to the world of work.

- a. Current practices for occupational trends were used.
- b. Instructional material was related to the world of work.
- c. Career Education techniques were incorporated in class activities.

Table 16 (continued)

Category J: Unique Competencies (continued)

77. Assist students in developing an awareness of economics in their daily lives.
  - a. Had students develop a daily expense chart.
  - b. Involved the students in individual saving techniques.
  - c. Encouraged banking procedures.
78. Assist students in developing the ability to accept supervision.
  - a. Students were shown films on the importance of accepting supervision.
  - b. Students were given advice and counsel upon request and at the instructor's discretion.
  - c. Each student was allowed to role-play the instructor for a day.
79. Assist students in developing a sense of responsibility.
  - a. Individual students were assigned specific job performance tasks.
  - b. Each student was given the task of keeping individual job cards on all finished or completed projects.
  - c. Students were required to read all bulletins posted for any club or social information.
  - d. Students were required to keep records of all assignments completed and incomplete.
80. Assist students in developing the ability to manage time.
  - a. Students were given schedules for completing assignments.
  - b. Each student was responsible for keeping his/her own individual time chart for class assignments.
  - c. Students were given assignments which demanded scheduling.
  - d. All students were responsible for prompt class arrival and clean-up.
81. Assist students in developing wholesome leisure activities.
  - a. Encouraged students to participate in extra-curricular activities.
  - b. Developed students' interest in hobbies.
  - c. Introduced games to involve students.
  - d. Encouraged students to support athletic programs offered by the school.
82. Assist students in becoming a productive member of the family.
  - a. Encouraged student to participate in all family activities.
  - b. Assisted in developing decision-making techniques as related to the individual's family.
  - c. Stressed family responsibilities.
  - d. Explained the economics of maintaining a job.
83. Assist students in developing a social, physical, and emotional security.
  - a. Explained students' value as an individual.
  - b. Students planned the social activities of the class.
  - c. Developed techniques to incorporate student mixing.
84. Assist the handicapped student in viewing his/her assets and limitations realistically.
  - a. Explained student limitations in terms of safety.
  - b. Gave realistic appraisal of students' performance.
  - c. Explained the value of peer rating to the students.
85. Assist students in developing reading, arithmetic, spelling, and writing skills.
  - a. Gave remedial assistance in the basic learning skills.
  - b. Utilized the correct methods of the basic learning skills.
  - c. Designed all work to be written in report form.
86. Compare occupations in relation to job description, required training, qualifications, and employment opportunities.
  - a. Defined the many facets of a given occupation.
  - b. Defined the qualifications of a given occupation.
  - c. Explained the limitations of a given occupation.
  - d. Kept current employment opportunities accessible to students.
87. Utilize behavior modification techniques and Adlerian methods.
  - a. Explained students' responsibilities prior to each learning experience.
  - b. Made students responsible for their performance in and out of class.
  - c. Involved the students' guardians in disciplinary problems.
  - d. Penalized students for bad conduct.

Table 14 (continued)

---

Category J: Unique Competencies

---

88. Demonstrate objectivity and sensitivity.
  - a. Student cooperation was emphasized.
  - b. Students were encouraged to make positive criticisms of peers.
  - c. Individual differences were stressed.
  - d. Each student was treated with respect and dignity.
89. Become proficient in the use of sign language if there are deaf students in the classroom.
  - a. Developed a functional usage of sign language.
  - b. Was able to communicate with the deaf students.
  - c. Utilized specific safety regulations for the deaf student.
90. Assist in identifying School Vocational Education purposes and goals for the handicapped student.
  - a. Aligned the instructional purposes and goals with the purposes and goals of the school vocational education program for the handicapped student.
  - b. Involved the handicapped students in aligning their personal purposes and goals with those of the school vocational educational program.
  - c. Evaluated and incorporated the handicapped student, the instructor and aids, and school vocational education purposes and goals in a mutual agreement.

APPENDIXES

BEST COPY AVAILABLE

# APPENDIX A HANDICAPPED

BEST COPY AVAILABLE

## INSTRUCTIONS

Listed below are various skills that may or may not be important to Vocational Education teachers, administrators, and supervisors who are serving handicapped students. Please read each item carefully and rate each item based on its importance to a teacher, administrator, or supervisor in a position similar to yours. Some skills may relate more to administration or supervision. There are no right or wrong responses; some items may be very important, while others may not be important. Please rate the importance of each item by circling the appropriate number to the right, from 1 = Very Important, to 6 = Not Important. Note that the first item has been marked as an example.

Very Important

Not Important

0. Use sound principles of public speaking. . . . . 1 4 3 4 5 6
1. Develop long-range plans for incorporating the handicapped student into the public school Vocational Education Program. . . . . 1 2 3 4 5 6
2. Recommend a Vocational Education Program for the handicapped student based on the needs of the community. . . . . 1 2 3 4 5 6
3. Collect occupational data which considers the handicapped. . . . . 1 2 3 4 5 6
4. Investigate apprenticeship programs and requirements. . . . . 1 2 3 4 5 6
5. Evaluate overall goals, content, and human and material resources. . . . . 1 2 3 4 5 6
6. Meet the needs of disadvantaged students with handicaps. . . . . 1 2 3 4 5 6
7. Conduct a student follow-up study. . . . . 1 2 3 4 5 6
8. Identify needs, interests of the handicapped student. . . . . 1 2 3 4 5 6
9. Provide learning materials that avoid abstractness. . . . . 1 2 3 4 5 6
10. Provide a variety of activities and experiences. . . . . 1 2 3 4 5 6
11. Evaluate new materials and ideas designed for handicapped students. . . . . 1 2 3 4 5 6
12. Evaluate program materials periodically. . . . . 1 2 3 4 5 6
13. Use socially integrated learning activities for the handicapped. . . . . 1 2 3 4 5 6
14. Construct a daily assignment sheet for class activities. . . . . 1 2 3 4 5 6
15. Group students according to ability. . . . . 1 2 3 4 5 6
16. Provide bilingual instructional materials for students with language barriers. . . . . 1 2 3 4 5 6
17. Sequence training programs for the handicapped student. . . . . 1 2 3 4 5 6
18. Write lesson plans for teaching the handicapped. . . . . 1 2 3 4 5 6
19. Develop units of instruction for teaching the handicapped. . . . . 1 2 3 4 5 6
20. Provide performance-based learning experiences for handicapped students. . . . . 1 2 3 4 5 6
21. Write performance objectives for handicapped students. . . . . 1 2 3 4 5 6
22. Select and obtain instructional materials prepared for handicapped students. . . . . 1 2 3 4 5 6
23. Plan optional learning activities for the handicapped. . . . . 1 2 3 4 5 6
24. Organize informational topics for the handicapped into similar units. . . . . 1 2 3 4 5 6
25. Organize committees and panels to work on group topics. . . . . 1 2 3 4 5 6
26. Direct individual and group field trips. . . . . 1 2 3 4 5 6
27. Conduct group discussions. . . . . 1 2 3 4 5 6
28. Stimulate learning through brainstorming and buzz group techniques. . . . . 1 2 3 4 5 6

OVER

|                                                                                                                | Very Important | Not Important |
|----------------------------------------------------------------------------------------------------------------|----------------|---------------|
| 29. Direct students in instructing other students. . . . .                                                     | 1 2 3 4 5 6    |               |
| 30. Employ the techniques of role-playing and simulation . . . . .                                             | 1 2 3 4 5 6    |               |
| 31. Direct student study of texts and references . . . . .                                                     | 1 2 3 4 5 6    |               |
| 32. Direct student laboratory experience. . . . .                                                              | 1 2 3 4 5 6    |               |
| 33. Direct students in applying problem-solving techniques. . . . .                                            | 1 2 3 4 5 6    |               |
| 34. Direct the project method . . . . .                                                                        | 1 2 3 4 5 6    |               |
| 35. Employ oral questioning techniques . . . . .                                                               | 1 2 3 4 5 6    |               |
| 36. Employ reinforcement techniques . . . . .                                                                  | 1 2 3 4 5 6    |               |
| 37. Provide instruction for slower and more capable students . . . . .                                         | 1 2 3 4 5 6    |               |
| 38. Present information through an illustrated talk . . . . .                                                  | 1 2 3 4 5 6    |               |
| 39. Demonstrate a manipulative skill . . . . .                                                                 | 1 2 3 4 5 6    |               |
| 40. Demonstrate a concept or principle . . . . .                                                               | 1 2 3 4 5 6    |               |
| 41. Direct individualized instruction. . . . .                                                                 | 1 2 3 4 5 6    |               |
| 42. Conduct team teaching . . . . .                                                                            | 1 2 3 4 5 6    |               |
| 43. Present information using a subject matter expert . . . . .                                                | 1 2 3 4 5 6    |               |
| 44. Illustrate with bulletin boards . . . . .                                                                  | 1 2 3 4 5 6    |               |
| 45. Illustrate with models and real objects . . . . .                                                          | 1 2 3 4 5 6    |               |
| 46. Present information with overhead projector . . . . .                                                      | 1 2 3 4 5 6    |               |
| 47. Present information with filmstrips and slides . . . . .                                                   | 1 2 3 4 5 6    |               |
| 48. Present information with films . . . . .                                                                   | 1 2 3 4 5 6    |               |
| 49. Present information with televised materials . . . . .                                                     | 1 2 3 4 5 6    |               |
| 50. Direct programmed instruction . . . . .                                                                    | 1 2 3 4 5 6    |               |
| 51. Present information with the chalkboard. . . . .                                                           | 1 2 3 4 5 6    |               |
| 52. Evaluate student performance according to instructional objectives. . . . .                                | 1 2 3 4 5 6    |               |
| 53. Utilize standardized as well as teacher-made tests . . . . .                                               | 1 2 3 4 5 6    |               |
| 54. Design valid and reliable measurement instruments. . . . .                                                 | 1 2 3 4 5 6    |               |
| 55. Use budgeting, purchasing and inventory procedures . . . . .                                               | 1 2 3 4 5 6    |               |
| 56. Maintain equipment . . . . .                                                                               | 1 2 3 4 5 6    |               |
| 57. Maintain a list of classroom safety rules . . . . .                                                        | 1 2 3 4 5 6    |               |
| 58. Supervise the safe arrangement of student work areas and stations . . . . .                                | 1 2 3 4 5 6    |               |
| 59. Assist students in career planning . . . . .                                                               | 1 2 3 4 5 6    |               |
| 60. Maintain current student records . . . . .                                                                 | 1 2 3 4 5 6    |               |
| 61. Involve the local community in activities for the handicapped . . . . .                                    | 1 2 3 4 5 6    |               |
| 62. Establish communications with potential employers of the handicapped . . . . .                             | 1 2 3 4 5 6    |               |
| 63. Involve local and state agencies in identifying career opportunities for the handicapped student . . . . . | 1 2 3 4 5 6    |               |

continued

|                                                                                                                                  | Very Important | Not Important |
|----------------------------------------------------------------------------------------------------------------------------------|----------------|---------------|
| 64. Work cooperatively with community groups and agencies . . . . .                                                              | 1 2 3 4 5 6    |               |
| 65. Prepare a monthly/quarterly newsletter. . . . .                                                                              | 1 2 3 4 5 6    |               |
| 66. Publicize the purpose of Vocational Education for the handicapped . . . . .                                                  | 1 2 3 4 5 6    |               |
| 67. Plan a "show day" or an open house . . . . .                                                                                 | 1 2 3 4 5 6    |               |
| 68. Report a student's progress to parents or guardians. . . . .                                                                 | 1 2 3 4 5 6    |               |
| 69. Use parent counseling and involvement . . . . .                                                                              | 1 2 3 4 5 6    |               |
| 70. Organize student vocational organizations . . . . .                                                                          | 1 2 3 4 5 6    |               |
| 71. Participate in workshops to compile and discuss ideas and student needs . . . . .                                            | 1 2 3 4 5 6    |               |
| 72. Keep abreast of new trends and techniques in teaching the handicapped. . . . .                                               | 1 2 3 4 5 6    |               |
| 73. Work with teachers in related fields in planning correlated and joint learning requirements and experiences . . . . .        | 1 2 3 4 5 6    |               |
| 74. Develop on-the-job training programs. . . . .                                                                                | 1 2 3 4 5 6    |               |
| 75. Motivate students . . . . .                                                                                                  | 1 2 3 4 5 6    |               |
| 76. Relate instruction to the world of work . . . . .                                                                            | 1 2 3 4 5 6    |               |
| 77. Assist students in developing an awareness of economics in their daily lives. . . . .                                        | 1 2 3 4 5 6    |               |
| 78. Assist students in developing the ability to accept supervision . . . . .                                                    | 1 2 3 4 5 6    |               |
| 79. Assist students in developing a sense of responsibility . . . . .                                                            | 1 2 3 4 5 6    |               |
| 80. Assist students in developing the ability to manage time . . . . .                                                           | 1 2 3 4 5 6    |               |
| 81. Assist students in developing wholesome leisure activities . . . . .                                                         | 1 2 3 4 5 6    |               |
| 82. Assist students in becoming a productive member of the family . . . . .                                                      | 1 2 3 4 5 6    |               |
| 83. Assist students in developing a social, physical, and emotional security . . . . .                                           | 1 2 3 4 5 6    |               |
| 84. Assist the handicapped student in viewing his/her assets and limitations realistically . . . . .                             | 1 2 3 4 5 6    |               |
| 85. Assist students in developing reading, arithmetic, spelling and writing skills . . . . .                                     | 1 2 3 4 5 6    |               |
| 86. Compare occupations in relation to job description, required training, qualifications and employment opportunities . . . . . | 1 2 3 4 5 6    |               |
| 87. Utilize behavior modification techniques and Adlerian methods . . . . .                                                      | 1 2 3 4 5 6    |               |
| 88. Demonstrate objectivity and sensitivity . . . . .                                                                            | 1 2 3 4 5 6    |               |
| 89. Become proficient in the use of sign language if there are deaf students in the classroom . . . . .                          | 1 2 3 4 5 6    |               |
| 90. Assist in identifying School Vocational Education purposes and goals for the handicapped student. . . . .                    | 1 2 3 4 5 6    |               |

In the blanks below, please add any additional Handicapped skills that you feel are important. Please rate the importance of these additional skills.

|           |             |
|-----------|-------------|
| 91. _____ | 1 2 3 4 5 6 |
| 92. _____ | 1 2 3 4 5 6 |
| 93. _____ | 1 2 3 4 5 6 |

over

# PROFESSIONAL DATA

Please check the appropriate response for each item as it applies to you in your current position.

1. Name of school in which you now teach: \_\_\_\_\_
2. No. of years in present position: 1-5: \_\_\_\_\_ 6-10: \_\_\_\_\_ 11-15: \_\_\_\_\_ 16-25: \_\_\_\_\_ over 25: \_\_\_\_\_
3. Total no. years as Vocational teacher: 1-5: \_\_\_\_\_ 6-10: \_\_\_\_\_ 11-15: \_\_\_\_\_ 16-25: \_\_\_\_\_ over 25: \_\_\_\_\_
4. Total no. years work experience (outside field of education): 1-5: \_\_\_\_\_ 6-10: \_\_\_\_\_ 11-15: \_\_\_\_\_ 16-25: \_\_\_\_\_ over 25: \_\_\_\_\_
5. Highest degree held: High School: \_\_\_\_\_ Associate: \_\_\_\_\_ Bachelor's: \_\_\_\_\_ Master's: \_\_\_\_\_ Advanced Master's: \_\_\_\_\_ Doctorate: \_\_\_\_\_ No. of quarter hours beyond your highest degree: \_\_\_\_\_
6. Special training you received to teach handicapped students (if any): \_\_\_\_\_
7. Age: \_\_\_\_\_
8. Sex: \_\_\_\_\_



Thank you.  
Please place the completed questionnaire in the self-addressed,  
stamped envelope provided and return it to us by mail.

Vocational Education  
Florida State University  
Tallahassee, Florida 32306

## APPENDIX B

College of Education  
Vocational Education  
904 Wilford Drive

The Florida State University  
Tallahassee, Florida 32306



TO: County Vocational Directors

Dear Colleague:

We need your help! We are in the process of identifying professional skills important to Vocational Education teachers, administrators and supervisors serving handicapped students. After important skills are identified, they may be included in programs to prepare individuals for these positions. Practitioners in the field, such as you, are the most qualified source to identify important skills. We ask your help by doing the following:

1. Please complete the enclosed survey instrument which lists various professional skills that may or may not be important to vocational teachers, administrators or supervisors. Although many of the skills relate to teaching, we are interested in identifying those that are important to county vocational directors and other administrators providing vocational education to handicapped students. Please complete the instrument by Dec. 5 and mail in the enclosed business reply envelope. Your responses will be held in strict confidence.
2. Please distribute the additional packets of materials to other administrators, supervisors or coordinators of vocational education in your district who are serving handicapped students. Each packet contains an identical instrument, a cover letter and a business reply envelope.

We realize that your professional duties require much of your time; however, you are the most qualified source to identify skills needed by county directors to meet the needs of handicapped vocational students. Your help will be greatly appreciated; we look forward to receiving your response.

Sincerely,

*Robert E. Andreyka*

Robert E. Andreyka  
Program Leader

REA/cc  
enc.

## APPENDIX C

College of Education  
Vocational Education  
904 Wildwood Drive

The Florida State University  
Tallahassee, Florida 32306



TO: Selected Vocational Administrators/Supervisors/  
Coordinators

Dear Colleague:

You have been identified as a vocational administrator, supervisor or coordinator who is serving handicapped vocational students. We need your help!

We are in the process of identifying professional skills that are important to vocational teachers, administrators, supervisors and coordinators serving handicapped students. These important skills may then be included in teacher training programs. We ask your help by completing the enclosed survey instrument which lists various skills that may or may not be important. While most of the skills relate to teaching, we are interested in also identifying those skills that are important to vocational administrators, supervisors and coordinators. Please complete the instrument and return to us in the enclosed business reply envelope by December 5, 1975. Your responses will be held in strict confidence.

We realize your professional duties require much of your time; however, you are the most qualified source to identify skills important to vocational administrators, supervisors and coordinators. Your help will be greatly appreciated. We look forward to receiving your responses.

Sincerely,

*Robert E. Andreyka*

Robert E. Andreyka  
Program Leader

REA/cc  
enc.

## APPENDIX D

College of Education  
Vocational Education  
994 Wildwood Drive

The Florida State University  
Tallahassee, Florida 32306



November 18, 1975

TO: Vocational Education Directors/Principals

Dear Colleague:

We need your help! We are now in the process of identifying professional skills that are important to vocational teachers serving handicapped students. Skills identified as important may then be included in teacher training programs. Your institution is listed in Vocational Education for the Handicapped, 1975-76 Status Report, as having applied for funds to develop vocational programs to serve handicapped students. Your assistance will be greatly appreciated.

We ask that you please distribute the enclosed packet(s) of materials to your vocational teachers in all subject areas who are teaching handicapped students. These packets contain a survey instrument which lists various professional skills that may be important to vocational teachers, a cover letter asking vocational teachers to rate the importance of these competencies, and a return envelope.

Your help in distributing the instrument and encouraging your vocational teachers to complete it will be of great help. Thank you.

Sincerely,

*Robert E. Andreyka*

Robert E. Andreyka  
Program Leader

REA/cc  
enc.

## APPENDIX E

College of Education  
Vocational Education  
904 Wildwood Drive

The Florida State University  
Tallahassee, Florida 32306



November 18, 1975

TO: Selected Vocational Education Teachers

Dear Colleague:

We need your help! We are now in the process of identifying professional skills that are important to vocational teachers who teach handicapped students. Skills identified as important may then be included in programs designed to prepare teachers. Vocational teachers who are actually teaching handicapped students are the best qualified source to identify important professional skills.

Enclosed is a survey instrument which lists various professional skills that may be important to vocational teachers serving the handicapped. We ask that you please take a few minutes and complete the instrument and return to us in the enclosed business reply envelope by December 5, 1975. Your responses will be held in strict confidence.

We realize that your professional duties require much of your time; however, you are the most qualified source to identify important skills. Your help will be greatly appreciated; we look forward to receiving your responses.

Sincerely,

Robert E. Andreyka  
Program Leader

REA/cc  
enc.

## APPENDIX F

### Open-Ended Responses for Handicapped

---

#### Program Planning Development & Evaluation

---

1. Design projects to allow student success.
2. Develop calculator operation classes for math.
3. Require certification specific to handicap area.
4. Schools should have fountains, urinals, etc. for wheelchair cases.
5. Develop direct measurement techniques for student and program evaluation.

---

#### Instructional Planning

---

1. Realistic application of skills learned to daily living and working areas.
2. Develop survival skills in students.
3. Develop teacher-made materials to relate where commercially-produced materials are unavailable.
4. Utilize "cluster" approach to vocational skills development.

---

#### Teaching Methods-Media

---

1. Individual teacher - student relations.
2. Let the students do the work even if you have to push.

---

#### Management

---

1. Orient blind and visually handicapped students to lab and safe use of power equipment.
  2. Instruct students in safety.
  3. Develop money management programs.
  4. Develop a budget and priorities to equip a classroom.
-

---

### School-Community Relations

---

1. Don't give up! Even if parents, counselors, or administrators don't support you.
- 

### Instructor's Professional Role & Development

---

1. Coursework in special education or vocational rehabilitation.
- 

### Unique Competencies

---

1. Never deny an error you make.
  2. Let the students know you are human.
  3. Except and accept only mature behavior.
  4. Do not let the exceptional student con you into doing his/her work.
  5. Many of the competencies do not apply at the 6th, 7th or 8th grade level.
  6. Grooming
  7. Sensitivity to student's needs, abilities and limitations.
  8. Patience
  9. Develop a success experience in every area for every student.
  10. Assist students in adjusting to situations that cannot be changed.
  11. Assist students in achieving harmonious living experiences with peers and community.
  12. Assist students in cooperating and competing with himself rather than trying to outdo others.
  13. Instill awareness of the importance of punctuality.
  14. Assist students in their awareness of school and job attendance.
  15. Develop jobs for special handicapped students.
  16. Constantly emphasize quality in workmanship.
  17. Assist students in learning the need to be employed.
-

## APPENDIX G

College of Education  
Vocational Education  
282 South Woodward

The Florida State University  
Tallahassee, Florida 32306



April 19, 1976

We need your help in determining how to assess when vocational education teachers and related personnel have attained important professional competencies. The Vocational Education Program at FSU recently completed a study which identified professional competencies important to vocational teachers and related personnel.

The next phase of this project will be to identify assessment criteria for each competency. These criteria will be used to assess whether competencies have been attained. You have been identified as having expertise in one of the areas within the project. We would like to request your participation on a "jury" to examine a preliminary list of criteria and to recommend revisions.

We will be able to offer you an honorarium of \$50 in appreciation for your help. Your participation will contribute to the development of more effective teacher education programs in Florida.

We will contact you soon to answer any questions you may have and determine if you are able to participate. Thank you.

Sincerely,

*Robert E. Andreyka*  
Robert E. Andreyka  
Program Leader

REA/La

## APPENDIX H

Division of Education  
Vocational Education  
202 South Woodward

The Florida State University  
Tallahassee, Florida 32306



### MEMORANDUM

TO: Jury Members for Validation of Assessment Criteria

FROM: Robert E. Andreyka

DATE: April 26, 1976

Dear Colleague:

We appreciate your agreeing to serve on a jury to examine criteria that will be used to assess whether vocational educators have mastered important competencies. Please find attached a list of your responsibilities as a jury member and an outline and example of the types of criteria statements desired. Also attached is a brief overview of the Exemplary Competency-Based Vocational Teacher Education project, of which criteria identification and validation is a part.

A graduate assistant assigned to the project will be working closely with you. This individual will bring or mail the preliminary criteria statements to you and pick them up or supply mailing envelopes for your returning them.

Again, our thanks for your professional contribution to this project.

## APPENDIX I

### FLORIDA STATE UNIVERSITY VOCATIONAL EDUCATION

#### Competency-Based Vocational Teacher Education Project

##### Responsibilities of Jury Members

1. Carefully examine the assessment criteria listed for each competency.
2. Determine if each criteria statement can be used to assess whether individuals have mastered the competency.
3. Make any additions, deletions, corrections or comments to the criteria statements you wish.
4. Have your revisions ready to be picked up or mail them by the date specified.

Criteria Statements Desired. When examining criteria statements, please determine if the criteria for each competency have the following characteristics:

1. Criteria statements covered all key elements of the competency.
2. Criteria statements were based entirely on the competency.
3. Criteria statements were written in past tense.
4. Criteria statements could receive only "yes" or "no" response.
5. Criteria were objective (did not rely heavily on judgement).

Example. Below is an example of a typical competency and appropriate criteria statements:

Component: Teaching in Trade and Industrial Education

Competency Category: Instructional Planning

Competency: Write a lesson plan.

##### Assessment Criteria:

1. The lesson was based on specific student performance objectives.
2. The introduction to the lesson was prepared.
3. An outline of the major concepts of the lesson was prepared.
4. The techniques and methods to be used in presenting the lesson were identified.
5. Learning experiences were selected based on the individual differences of students.
6. A summary of the lesson was prepared.
7. Evaluation devices/techniques were identified.
8. Resource materials were specified.

FLORIDA STATE UNIVERSITY  
VOCATIONAL EDUCATION

Competency-Based Vocational Teacher Education Project

One of the main objectives of the Competency-Based Project at Florida State University is to change the teacher education curriculum from the traditional course-oriented approach to the more individualized competency or performance based approach. Instead of selecting a variety of courses in different vocational areas, individuals will work towards mastering important competencies. Where will the competencies come from? Vocational educators in Florida who are currently serving as teachers, administrators and related professionals have been involved in the competency identification process.

The Project is composed of several phases and includes the areas of Administration and Supervision, Career Education, Cooperative Vocational Education, Disadvantaged, Handicapped, Industrial Arts, Research, Trade and Industrial, and Technical Education. The team approach to identifying competencies in each area has been used, with graduate assistants, FSU faculty and other advisors as members of each team. During the Fall Quarter, each team identified a preliminary list of skills that were considered necessary for success in the different areas, such as administration, career education, etc. Each list was presented to a panel of experts for additions, corrections and revisions. The final list was developed into a questionnaire and sent to a sample of Florida vocational educators. These practitioners rated the competency statements as to importance for vocational educators in positions similar to their own. The team spent the Winter Quarter analyzing the results and determining which competency statements were considered most important. During the

Spring Quarter, the teams have been writing assessment criteria for the various competency statements. These criteria statements are now ready for examination by a jury. A jury has been selected for each area within the project to examine the criteria statements and recommend appropriate revisions.

The criteria for each competency will be used to determine whether individuals have mastered the competency. The criteria statements will be incorporated onto a check list that an evaluator may use to assess the individual's performance during or after the competency has been demonstrated.

---

BIBLIOGRAPHY

## BIBLIOGRAPHY

- Andreyka, R. E. Competency-based teacher education for industrial education teachers. Phase I competency and criteria identification and validation for preservice education. Tallahassee: Florida State University, 1975.
- Andreyka, R. E., & Blank, W. E. Competency-based vocational teacher education in Florida. Presentation at the Florida Vocational Association Conference, Orlando: August 1975.
- Andreyka, R. E., & Blank, W. E. A checklist for the evaluation of competency-based teacher education programs. Educational Technology, 1976, 16(1), 34-36.
- Blank, W. E. Analysis of professional competencies important to Florida's community college technical instructors: Implications for competency-based teacher education. Unpublished doctoral dissertation, Florida State University, June 1976.
- Bloom, B. S. (Ed.). Taxonomy of educational objectives, handbook I: Cognitive domain. New York: David McKay, 1956.
- Brown, G., McIntosh, S., & Tuoti, L. Career education materials for educable retarded students; project price working paper no. 2. Columbia, Missouri: Missouri University, Department of Counseling and Personnel Services, sponsored by the Bureau of Education for the Handicapped (DHEW/OE), Washington, D.C., December 1974. (ERIC Document Reproduction Service No. ED 104 067)
- Center for Vocational Education. Listing of professional vocational teacher education modules. Columbus, Ohio: Center for Vocational Education, 1974.
- Center for Vocational Education. News Release. Columbus, Ohio: February 1975.
- Cotrell, C. J., Bennett, J. B., Cameron, W. A., Chase, S. A., Molnar, J., & Wilson, R. J. Model curricula for vocational and technical teacher education: Report no. 1. Performance requirements for teachers (Final Report). Columbus, Ohio: Center for Vocational Education, 1971. (ERIC Document Reproduction Service No. ED 059 355)

- Courtney, E. W. A conceptual basis for developing common curricula in teacher education programs for occupational education (Graduate Studies in Education, No. 2 Volume 3). Menomonie, Wisconsin: Stout State University, 1968. (ERIC Document Reproduction Service No. ED 022 028)
- Courtney, E. W., & Halfin, H. H. Competencies of vocational teachers. A factor analysis of the training needs of teachers of occupational education. Corvallis: Oregon State University, 1969.
- Crawford, L. C. A philosophy of distributive education, a report of the first step in the research project "A competency pattern approach to curriculum construction in distributive teacher education". Bethesda, Maryland: 1967. (ERIC Document Reproduction Service No. ED 019 412)
- Dodl, N. R., & Schalock, H. D. Competency-based teacher preparation. In J. M. Cooper, et al (Eds.). Problems and prospects for the decades ahead (Book 1). Berkeley: McCutchen, 1973.
- Elam, S. Performance-based teacher education: What is the state of the art? PBTE Series: No. 1. Washington, D.C.: American Association of Colleges for Teacher Education, 1971.
- Finch, C. R., & Hamilton, J. B. Issues in the implementation of performance/competency-based teacher education programs. Journal of Industrial Teacher Education, 1975, 12(4), 14-21.
- Florida State Department of Education. The Florida program for improving the training, evaluation, and licensure of education personnel. Tallahassee, Florida, 1971.
- Florida State Department of Education, Bureau of Education for Exceptional Students. Programs for Exceptional Students. Annual Reports. State of Florida Department of Education, Tallahassee, Florida, 1973-74.
- Florida State Department of Education. 1974 Report. Tallahassee: Florida State Advisory Council on Vocational and Technical Education, 1974.
- Florida State Department of Education. Florida State Plan 1974-75, Part II--Annual and Long-Range Program Provisions: Division of Vocational, Technical and Adult Education, Tallahassee, Florida.
- Hamilton, J. B. PBTE Curricula. Paper presented at the American Vocational Association Convention, Anaheim, California: December 1975.

Houston, W. R., & Howsam, R. B. Competency-based teacher education. Chicago: Science Research Associates, 1972.

Hull, M., & Halloran, W. Professional development program for vocational educators of handicapped students. Final report. Burlington, Vermont: Vermont University, Department of Vocational Education and Technology, and the Vermont State Department of Education, Division of Special Education and Pupil Personnel Services, Montpelier, August 1974. (ERIC Document Reproduction Service No. ED 100 089)

Kansas State Department of Education. The special vocational program for handicapped youth and adults. Topeka: Kansas State Department of Education, Division of Vocational Education. (ERIC Document Reproduction Service No. ED 102 800)

Kirk, Samuel A. Educating exceptional children, Second Edition, Boston: Houghton Mifflin Company, 1972.

Lima, J. A project to develop a catalog of business education teacher competencies with accompanying performance based units. Tampa, Florida: University of South Florida, Vocational and Adult Education, 1972-73.

Michigan State Department of Education. A project to train vocational education and special education teachers to work cooperatively in occupational preparation of handicapped persons. Mount Pleasant, Michigan: Central Michigan University, sponsored by the Michigan State Department of Education, Lansing, 1974. (ERIC Document Reproduction Service No. ED 092 782)

Norton, R. E., Harrington, L., & Gill, J. Performance based teacher education: The state of the art. Columbus, Ohio: The Center for Vocational Education, The Ohio State University, 1975.

Perkins, L. H. Competencies of trade and industrial teachers as perceived by teachers, supervisors, school administrators and teacher educators. Pensacola: University of West Florida, 1975.

Ratner, M. Community college health careers project phase II - teacher preparation (Final Report). Albany: New York State Department of Education, 1967. (ERIC Document Reproduction Service No. ED 019 505)

Schaefer, C. J. A rationale for comprehensive personnel development in a state. Paper delivered at the Fourth Annual National Leadership Development Seminar for State Directors of Vocational Education. Las Vegas, Nevada. September 1971.

- Schmieder, A. Competency-based education: The state of the scene. PBTE Series: No. 9. Washington, D.C.: American Association of Colleges for Teacher Education, 1973.
- Spaziani, R. L., & Courtney, E. W. The application of Bloom's cognitive taxonomy to selected professional education competencies. Corvallis: Oregon State University, 1971.
- Terry, D. R., Thompson, R. L., & Evans, R. N. Competencies for teachers: Vocational education shows the way. Urbana: Illinois University, 1972. (ERIC Document Reproduction Service No. ED 067 467)
- U.S. Department of Health, Education and Welfare, Bureau of Education for the Handicapped. Better education for the handicapped. Annual fiscal year reports. Washington, D.C.: 1968, 1969, 1970.
- U.S. Department of Health, Education and Welfare, Office of Education, Bureau of Adult Vocational and Technical Education. Inservice (AMIDS) training workshop for vocational education of disadvantaged and handicapped students. (How to plan, conduct, evaluate) (supplementary materials--part A) (supplementary materials--part B). Link Enterprises, Inc., Montgomery, Alabama, 1973.
- U.S. Department of Health, Education and Welfare, Office of Education, Bureau of Education for the Handicapped, Vermont State Department of Education, Montpelier. Professional development program for vocational educators of handicapped students. Final Report. Vermont University, Burlington, August 1974.
- Volger, D. E., & Patton, G. The development and implementation of preservice and inservice occupational teacher education programs designed to meet certification and baccalaureate degree requirements. Ann Arbor: The University of Michigan, 1974.
- Walsh, J. J., Breglio, V., & Langlois, J. T. An assessment of vocational education programs for the handicapped under part B of the 1968 amendments to the vocational education act. Final Report. Salt Lake City: Olympus Research Corp., sponsored by the Office of Education, U.S. Department of Health, Education and Welfare, Washington, D.C., October 1974. (ERIC Document Reproduction Service No. ED 101 501)
- Walsh, J. P. Teacher competencies in trade and industrial education. Washington, D.C.: U.S. Government Printing Office, 1960.

White, T. R., et al. Vocational education for the disadvantaged and handicapped in Indiana; A status report. Bloomington: Indiana University, School of Education, sponsored by the Indiana State Board of Education, July 1974.

Yamagata, B., Angle, G. H., Lupia, C., Williams, E., Sharpes, D., & Selph, M. Curriculum guide for the work-study program, 1974. Fairfax County, Virginia, 1974.  
(ERIC Document Reproduction Service No. ED 100 094)

CE 005 246